MEDICAL JOURNAL OF AUSTRALIA.

Vol. I. SYDNEY, DECEMBER 19, 1914. No. 25.

SURGERY AS A CRAFT (1).

By **J. Kynaston Couch, M.D.,**
Assistant Gynæcologist, Perth Public Hospital.

My paper this evening would have been better designated "Operative Surgery as a Craft," and my remarks will point to a better system of teaching the craft of operative surgery during our student's career.

As I have been on the honorary staff of this hospital for eight years, and, previous to arriving here, was on the staff at Swansea for sixteen, and, having during the whole of this time, been on the surgical side, I have seen a large number of residents tackle their first major operation.

Amongst these embryonic surgeons was one whose fingers struck me at once as those of a craftsman, and, on making inquiries, I found he had done a lot of carpentering and machine-shop work.

On one occasion I was asked at home to give an anæsthetic for a radical cure of a hydrocele, and, after the operator had been worrying round for half an hour, he turned towards me and said "please finish the job." Now this man was a M.D., B.S. and B.Sc. of London University, and he had done his first fellowship and had been in practice for five years. So one could take it for granted it was not want of knowledge but want of craft that caused him to resign.

Even in such work as the suturing of a wound how men vary in their skill! I am not referring to fancy suturing but to ordinary, plain, straightforward work. Even here their fingers are all thumbs, they cannot thread their needles without taking a minute over it. A few months ago, after I had done a Gillian's shortening through a Pfannenstie's incision, I asked the theatre sister to complete the operation. This she did in a most expeditious manner, and her sewing absolutely the quickest and best I have ever seen.

I can now claim to have lived through the dawn of modern surgery. When I entered the Middlesex Hospital in 1884 every surgeon kept an old frock coat hanging up in the ante-room, and he was extremely proud of it when it was stained with blood, pus and other fluids. The hands were not washed but were rinsed in one in sixty carbolic, the silks for tying the vessels were carried on the buttons of the septic coat, and the instruments were always vaselined and put back into the wooden cabinet. Carbolic sprays were played on to the wound during the whole operation.

Catgut had not come into general use, and all the ligatures in an amputation wound were brought out through the corners of the flaps, where they had to be pulled through about the eighth or tenth days.

There was always a large tray of sawdust to catch the blood and other fluids. I assure you we were all very proud when we got primary union.

One afternoon a week was reserved for the operations of all the surgeons at this large hospital, and any cases left over were done on the following Saturday. All the surgeons and assistant surgeons were present, and anyone of them could dip his hand into the carbolic and put it into the wound and give his opinion.

Radical cures were in the experimental stage, and ovariotomies or a gall-stone operation usually attracted not only all the members of the staff, but also those from other London hospitals. Post nasals had not been operated on, and I only saw one case of perityphilitic abscess. I never saw a case of appendicitis, as they were called peritonitis or acute intestinal obstruction, and were allowed to die.

During my dressership, the house surgeon was permitted to amputate a few fingers and to open one or two whitlows.

Gentlemen, does not all this seem a jump to the present day; then we were delighted if we got primary union, now we are annoyed if we don't get it, and to explain why the wound has become septic the surgeon in his selfishness blames everybody but himself, the catgut usually being the scapegoat. The surgeon has forgotten that he incised an abscess in the morning and contaminated his hands in doing so. When he finds the wound broken down it is the theatre sister that frequently gets the blame, although I sometimes think a patient's skin washed at home and not touched by a ward nurse in its preparation is a more aseptic field for an operation than one that has gone through the modern technique of shaving, scrubbing, turpentine, ether, perchloride and last—and I think its colour is the most useful point—our old friend iodine, originally introduced by Bryant, of Guy's Hospital, and recently become fashionable again. It is astonishing if we are careless with our hands, how our wounds suppurate, even if we always wear gloves. It seems practically impossible to get our gloves on without touching the outside occasionally with the other ungloved hand. I cannot help thinking that the stain of iodine round a wound is like the usual notice, "Keep off the grass." I always do my best to cover all the edges of my wounds with towels, either sewn inside the edges or attached by Moynaham's forceps. An idea from Lane's technique for wiring bones is most useful in keeping wounds free from infection, hence I always like to see swabs handled by forceps and not kept in the assistant's hands, and the less our wounds are touched, even by gloved hands, the better.

Even in such a thing as swabbing a wound, I see the wounds bruised again and again by harsh swabbing. It seems as if some men were afraid that a patient cannot stand the loss of a drop of blood, and the slightest appearance of a bleeding point means dropping the scalpel, picking up an artery forceps, then tying the vessel and so on time after time, instead of waiting until there are several bleeding

(1) Read before a meeting of the Western Australian Branch of the British Medical Association on September 16, 1914.

points, and tying a number one after the other from the same strand of catgut. By this method, several minutes are saved at an operation. It would do good to some of these—amateur surgeons I call them—if they saw some of the American and London experts do a sub-total hysterectomy in half an hour, while they have hardly got into the abdomen in that time.

In the modern operation, the vessels are tied with catgut, which ought to be as fine as possible consistent with the size of the vessel to be tied, and I frequently use two strands of O or double O in preference to one of number one. In fact, the less foreign substances we leave in our wounds, the better.

For shape, I much prefer Halstead's forceps; they have very fine points, and can catch hold of the vessel and very little tissue need be caught as well; they therefore cause a much safer ligature and one less liable to slip and give rise to reactionary hæmorrhage. I sometimes see surgeons using forceps with points broad enough to hold an elephant's aorta. Whether they use these to make sure of catching something, or perhaps their sight is so bad they cannot see the bleeding point, and trust to luck to catch it.

Now, after the surgeon has sewn up his wound, he is not satisfied that the iodine has been swabbed away from the surrounding skin during the operation, but he must once more take a dab and plaster the edges of the wound and the surrounding skin. They say to themselves, I am not satisfied with my technique, I am afraid I have done something wrong, I will try and kill the germs if any have walked in. Now, gentlemen, you will now ask where does the term "surgery as a craft" come in, after this long introduction.

I long since came to the conclusion that the craft of surgery was the worst-taught of all the branches of medicine. Notice I lay stress on the world craft, as opposed to the word art. We all get a grinding in the science, but when it comes to applying our knowledge, it is quite a different story. It reminds me rather of the conjuror who first of all shows you a trick, then if you are a friend, he shows you how to do it slowly. Then you try to do it yourself, and see what a lot of practice it takes to do one trick properly.

What is the usual curriculum, and how much craftsmanship does he acquire during his student's career. For two or three winter sessions he dissects, and he uses his two hands, one to hold a forceps and the other to hold a scalpel. Does he learn to sharpen his scalpel even? I say no.

He dresses for six months, during which period he gradually acquires the surgical instinct of asepticism, to bandage, and he assists the great man at his operations, the house surgeon (his immediate superior) being assistant number one, and he may occasionally be asked to hold a retractor, or to pass a forceps or thread a needle. He joins a class of practical surgery, when he is taught to do a few operations on a dead body; of course he must tie a few vessels, and there are classical amputations one or more he is allowed to do if he is so fortunate. He then sits for an examination, and he is licensed to do any operation from a circumcision to a gastrectomy.

If he is fortunate enough to get an appointment as a resident, he may be allowed to do a hernia or perhaps an appendix. This latter is a great favour, but really he learns very little of operative surgery during this period. He must do some larger operations himself, beyond those of the usual lines of demarcation of the wrist and ankle, which in my day were considered the dividing lines between the operations of the resident and the honorary.

I have met many residents who did not have the opportunity of doing even a tonsillectomy, let alone a hernia, during their residence. Their chiefs seem to be so jealous of their residents acquiring too much skill, or is it that they want every opportunity to practice themselves?

I often think there ought to be a special course of study, which one of the seniors of a teaching staff should give. One not a special but a general surgeon, and all the students should attend regularly. Here the uses of the different instruments should be explained and practised. The senior surgeon, from a lot of practical experience, has gatheerd together a lot of tips in the use of them. Take the art of measuring a limb for instance, to show the best points to measure from. Even the way to hold a nasal speculum, the use of a tongue depressor, the passage of eustachian catheters, the use of a posterior rhinoscope. Just think what points in the use of a laryngoscope can be shown on a corpse for instance; points in the reduction of fractures; how the limbs are to be held. Just look how the new house surgeon holds his scalpel when he starts an operation; he has never been shown how to hold it. Even the passage of a stomach tube. What points can an expert, who has done it a good many times, show a novice. Now, all these points cannot be sufficiently demonstrated in a class of so-called practical surgery, but they are described, but not practised, and there is only one way to learn the tactus eruditus, and that is to do it yourself, and they all can be easily demonstrated and practised on a formalin preserved corpse.

The only operation we were specially taught to do was vaccination, and we had to put in five attendances of an hour each, and even then I don't think I was allowed to perform the operation, but we all had to stand like dummies watching the great man. We had to get a certificate that we have received special instruction in the science and art of vaccination, and for this we had to pay the sum of one guinea.

If the young medico is, fortunately for himself and unfortunately for his patient, able to persuade some old individual who has to part with a limb to allow him to try his 'prentice hand on the job, this he attempts in the superior manner he saw his chief doing to make his flaps by his eye alone, and is quite surprised that there is such tension on the flaps when they are brought together. When I was an assistant surgeon with charge of beds, and I did a lot of emergency amputations, I remember how I

was smiled at by the residents, because I measured the limbs and drew the outline of the flaps with a blue pencil.

I can sincerely state this: In the manner amputations I performed and followed this routine, I never had any trouble in getting my flaps together. In carpentering not human, every craftsman sets and marks out all his work with a pencil or a scriber. He is doing this work all day, and yet he never trusts his eye, yet the surgeon who performs one or two amputations a year dares to do it by eye alone, and would consider it very elementary if he saw anyone using a tape.

Take, for instance, the operation of circumcision in the case of a young child. Did it ever occur to you to make a mark on the skin before you apply the clamp? Have any of you removed too much skin and found you had to suture the mucosa of the frœnum to the skin of the scrotum? I think this is a fairly common accident, and I think the best way to guard against doing so is to excite the member first of all, and make a nick with your scissors through the skin, so you can tell exactly where to put your shield or clamp. There is no simple operation performed so often, and yet how often is it bungled.

Even in the act of using a saw I have learned infinitely more about the use of this instrument from a carpenter's shop than I ever did while I was a student. You will all say anyone can saw through a bone: it is the easiest part of an amputation. There is a right and a wrong way to hold it, how much pressure you are to use, and how to keep it straight. I have seen the bone splintered on more than one occasion during an amputation.

Surgery, to my mind, is nothing more than carpentering. It used to take five years to turn out a carpenter under the old apprenticeship days, and even after this he usually acted as an improver for the next two years, before he considered himself a full-blown craftsman.

And yet, any medico considers himself competent to undertake even abdominal operations when he has done six months watching another man doing them.

Does not this strike you as practically impossible for any ordinary individnal to turn out good work offhand?

Can anyone learn to sharpen a chisel by seeing another man do it? Can he learn to saw a piece of wood straight by watching another man do it? I can only say, gentlemen, try and see what a hash you will make of either unless you have been first taught and had practice afterwards.

Look at the usual kit of tools which you see at a private operation! Perhaps half a dozen varieties of artery forceps; some from their pattern were used by Noah in the ark. Look at the scissors; their edges have gone, and they are frequently a quarter of a century old. A few scalpels are taken out and put into the lysol; why, so that each can be tried until the operator can find a sharp one. How does be find one? Simply by seeing if he can cut through the skin. Can he tell if it is sharp before he tries it on the patient? I answer, he does not know how to do it.

Look at the gorgeous costume frequently worn by some extremists at an operation. How they are garbed! I often think when they have their masks on that I am looking at some heretics getting ready for an Auto de Fi. I long ago came to the con clusion that if I had to wear a mask I would stick to the stethoscope, and put the scalpel on the shelf.

I suppose many of us have been in dental chairs under different dentists. One comes in and examines your mouth, and you are hardly aware of what he is doing, while the next one comes in, and from the moment he puts his finger in to retract your cheek you wonder if he has craftsmen's fingers or not. One has a light touch and the other is only fit to operate on a horse. The same thing one sees when physicians are percussing the chest; one man taps your chest as if he was tapping a boiler-plate, while the other percusess so lightly he would hardly disturb a fly in the immediate neighbourhood. Yet we all know whose opinion is of the most value.

I think it must have been in 1896, when the B.M.A. met at Bristol, that I heard the late Greig Smith a few months before his death state that every surgeon should spend at least three months learning to carve wood. If he thought it necessary then, how much more so is an apprenticeship to a mechanic's bench necessary now, when such operations as bone grafts, medullary splints, bone screwing and wiring are done every day. It is delightful to read Murphy relate his operations in the formation of these medullary splints. He certainly would make a fine cabinet-maker or metal-worker. Take, for instance, how many of us know how to screw two pieces of wood together so as to make a firm joint in a workmanlike manner, and yet the majority of men who are in practice in W.A. to-day, provided they have a few instruments would not hesitate for one moment to undertake such an operation as screwing two bones together. Ask them first of all to try and repair a broken leg of a chair. What will happen is this; if it is an oblique fracture of the leg of a chair, they will first of all use the same bit to go through each half, they will not countersink for the head of the screw, and they do not know that the screw should pass easily through the first part. They will also use too thick a screw, and they will trust to brute force to get the screw home, with the result that, in place of one fracture, the parts will be so comminuted that nothing but a new leg will be of any good. Now, the same thing will happen in screwing a bone. I have seen it done more than once, and yet any of our G.P's would not hesitate to undertake the operation.

Probably the majority of us have successfully wired a fractured limb; perhaps a few, like myself, have occasionally failed—we have bored the bones properly, got our wires through, and then what happens, the wire snaps, or the bones may commence to over-ride one another. The latter I will not deal with, but why should the wire break? Simply because it is not annealed. You can do what you like

with fine silver wire, if it is annealed, but try and twist unannealed wire together, and it will snap. Now, this is a point which I learned from a silversmith, and he told me how to anneal it. Hence I have had no trouble with wires breaking since.

Even to handling a razor, what points of craft can one learn from conversation with a barber. How many of us can hone and strop a razor sufficiently well that you would like to be shaved with it. Yet think how often a surgeon shaves his subject. Were you ever taught as a student how to handle a razor. I remember once shaving a barber's neck; I did not know he belonged to our sister branch, and I met with considerable criticism and also a certain amount of hostility at his hands. The reason why safety razors always make a painful shave is that you only cut with a dragging movement, you miss the horizontal sweep of the blade. The same oblique movement Louis the Sixteenth suggested to Dr. Guillotin when he advised the slanting edge to the blade of his machine.

I often think the correct movement of a scalpel is to keep the cutting edge at the same angle with the surface from its point of entrance to its point of exit. One sees the same angle kept while using a diamond, or using a marking knife or gauge. That is why knives vary according to the fads of different surgeons, and one sees knives called after the Mayos, simply I think because they prefer cutting at a certain point from the end of the blade.

An instrument I often use in my rooms is a pair of mechanic's calipers, shaped like a small pelvimeter. Measurements by tapes seem to me to be so fallacious while a pair of calipers can stretch over irregularities of surface, and can be used for comparing the sizes of diseased with those of the corresponding healthy joints. This is a point I gathered from a mechanic's bench. I use a common steel one, costing one or two shillings. I suppose an instrument house would put up the same tool for the same purpose and charge us sufferers half a sovereign for it.

I read a book a few years ago called the "Recollections of a Physician," by Verasaeff (a Russian). It was a very morbid book, and it was condemned by the whole of the London medical press. Why? Because it contained a lot of unsavoury truths, and I remember one case where the great man did an intubation as easily as possible after the young doctor had been trying to do the same thing, and had failed after many attempts. He referred to the number of cases the great man must have failed in before he had acquired such skill.

This story came home to me in a case I was asked to extubate in a lad of twelve, where the string had been cut. I tried for several minutes, when my senior surgeon came along and took it out at the first attempt.

It used to be related of Sir Henry Thompson that he always carried a lithotrite in his brougham, and he used to practice picking up a stone which he had dropped down the sleeve of his coat. Sir Morrell McKenzie used to practice on a laryngeal phantom continually, catching hold of little fragments of paper attached to the vocal cords, so as to be proficient in the use of laryngeal forceps in taking off vocal nodes. When I did post graduate work at the hospital for stone, St. Peter's, Covent Garden, nothing surprised me more than seeing Pardoe and Thompson Walker passing bristle bougeis or number one or number two soft bougies through pinhole strictures. This I call real craftsmanship, and a few years ago I read a letter from an old surgeon who had had a prostatectomy describing the craftsmanship of the different residents who had passed catheters on him, to some very much to their discredit.

I did a lot of post graduate work at the Golden Square throat and nose hospital, and I was very much struck with the varied surgical touch men displayed in using throat and nose instruments. Some men could not use a tongue depressor without causing the patient to retch or gag, and they certainly could not use a posterior rhinoscope, and even if they used a Thudicum's nose speculum, the patient complained of pain. Have you ever had a nasal specular introduced? Well, if you have not, get three or four of your friends to try, and see how their fingers vary. You will suffer great pain at the hands of some, while others can find out far more with much less pain. I am constantly seeing the same thing with my residents while they are doing a bimanual, and I can tell if they are hurting the patients at once, because you will immediately see the recti contract.

Now, gentlemen, how are you going to teach the embryonic surgeons of this great continent of ours to acquire a certain amount of skill and craftsmanship in their technique? The only way I can suggest is to put them on to a craft demanding the use not only of their hands, but also their eyes. I refer to the craftsmanship of the cabinet-maker or high-class joiner. Let every student get signed up for two hours a week during the whole of the curriculum of five years. It will teach them how to sharpen their tools, to know when they are sharp; also see how their eyes get trained to recognize any inequalities of surface, and in the use of chisels and hammers, what control they can get over their hands.

Look at a mastoid operation: I often think a sculptor or wood-carver would be the very one to do the operation; look what a delicate touch he would have with a mallet and chisel.

For our bone surgeons or specialists, just think what knowledge they would gain of the use of their chisels in doing a bone graft or a medullary splint; in what direction a chisel would go according to its bevel. Even in the use of a saw he would learn a great deal.

I often think a watchmaker would make a fine eye surgeon, and twelve months spent at a watchmaker's bench would not be time thrown away in making them good ophthalmic craftsmen.

Two hours a week would train the bulk of the men very well, and unless a man never had anything on to his palms except thumbs, he would be bound to be improved by such training.

Take golf for instance, a man will go out with one kind of iron and practice with this one instrument for a week at a stretch, and yet begrudges the time spent to perfect himself in the trade or craft of his adoption.

One of the finest plastic surgeons I ever knew had served his time in an engineer's shop, and his judgment in his flaps was nearly perfect.

I often think if the young surgeon learned to do a little sewing at the hands of a tailor it would assist him wonderfully when he came to sewing planes of fascia and skin together, and think how quickly he could do his work.

It is amusing, yet nevertheless true, how one craftsman judges another man by his own standard. Only this week I did some fine sewing on a boy's eyelid, and his employer, who was a tailor, looked on and criticised my craftsmanship; fortunately for me I was in good form, and did a decent piece of work.

I have frequently seen men tying their knots as if they were handling a bit of ship's rope, and even then I do not think they would make good yachtsmen, they are so slow over it.

Take the ordinary reef knot. Here again, unless the medico has done St. John Ambulance classes, he would be practically ignorant of the difference between a "granny" and a reef knot.

Now, a few words about the assistant: how much easier is it to work if you have the same assistant day after day—one who knows your fads and also knows when you want advice, also when he can go on helping you and knows when such help will be appreciated. Some very good men make very bad assistants, because they are unable to sink their own individuality. They can only see one way of doing the operation, and that is their own, and they keep nagging you all the time, and certainly irritate the operator, although they do it quite unintentionally. I have on more than one occasion reminded the officious assistant that I was in charge of the case, and not he.

I consider the assistant's hands should really be the operator's third and fourth hands, and a good assistant hardly requires to be told what the operator wants him to do, but intuitively does it. This I consider real craftsmanship. I have had many men give anæsthetics for me to do a nose or tonsil case, and beyond putting the patient to sleep they have left me to hold the gag or speculum, and, in fact, proved to me their knowledge of surgery was very limited and their hands useless.

A word or so about swabbing the throat during an anæsthetic. Why do the majority of men keep swabbing the throat? Because there is a little mucus and the patient's breathing is noisy. Personally I never swab the throat for anything except severe hæmorrhage; I think it tends to promote the flow of mucus, gagging and vomiting.

It is some years since Sir Felix Semon uttered a protest against the wholesale adenoid operations, and I remember his account when two ladies were introduced to each other at an at home. The first question one put to the other after the mutual introductions was, has your child been done yet? and I can see the same fashion as far as prepuces are concerned in the new-born babe, the request the mother or nurse puts to the doctor is the father wishes him done, not referring to the posterior nares in this case, but to another and more evident part of the body.

Only this week, when I had superintended the arrival of four immigrants into this State, and they all happened to be of the male variety. Every one of the mothers asked me to do the operation of circumcision. In two of them, however, I postponed the operation, because I told the parents I could only do a satisfactory operation as a work of art by the aid of a magnifying lens.

Now gentlemen, I trust you will have borne my remarks in a patient manner. My suggestion is that every medical student should be a member of a wood-working class, and should attend the same for two hours every week to learn how to use his eyes and hands, one hour a month at tailor's class to teach him how to sew, and two hours a week to practice the use of different instruments on a dead body. He cannot get sufficient material in the dead house to acquire sufficient dexterity for human carpentering, and therefore let us do the next best thing, practice on wood. I have myself been a member of a wood-working class for five years, and I look forward with the greatest pleasure to my carpentering evening.

There is no doubt one can acquire a great deal of skill in performing the same operation a large number of times, and in so doing what a great benefit it must be to the patients. Think how the eye and hands can get trained so as one can save many minutes, and every minute after an hour tells very much against the patient from the point of view of shock.

If you look at the statistics of Wertheim's operation, the earlier ones took 2½ to 3 hours. Now a good man, after he has done a dozen or so, can do it in an hour to an hour and a half, with a corresponding fall in his mortality.

I often think of the man who applied for an appointment entailing great skill and experience, and he was asked had he ever made a mistake. His reply was, to his knowledge he had never done so. The reply given to him was if he could not tell when he made a mistake he was no good for the appointment. I think this little story can be applied to our work as surgical craftsmen.

Statistics were quoted years ago of the number of certain operations that we did without a death, as evidence of our skill. Nowadays it seems to be the rule to quote the number of operations you do without pricking your gloves. Sepsis is very rarely seen now. I cannot explain it, and I do not know if it due to better technique, but I have only had one primary torn perineum fail to heal by first intention during the last eight years, when nursed by all sorts of midwives. You all know the attention paid in these cases by ignorant women. In my earlier days of practice it was the exception and not the rule for these cases to heal by primary union. Here again I can only explain it by the use of gloves and

keeping your hands free from infection. I must say, however, I consider if you are a rapid operator it is practically impossible to work without pricking one's gloves.

Now, gentlemen, I make these remarks and suggestions with all humility to the large number of craftsmen that are here to-night. I am very conscious of all my own shortcomings. We all make mistakes in diagnosis and technique, and the best craftsman is he who makes the fewest.

I have written this paper not for the accomplished surgeon or specialist, but for some of our general practitioners of that great body of whom I consider it an honour to be a member.

———o———

IMPORTANT ALTERATIONS IN THE NEW PHARMACOPŒIA.

By **Cuthbert Hall, M.D., Ch.M.,**
Parramatta.

As pharmacists will require to dispense all drugs and preparations according to the strengths and composition of the new Pharmacopœia from 1st January, 1915, prescribers need to familiarize themselves without delay with all material alterations in drugs in common use, so as to be sure of exact dosage.

The principal changes are:—

Acetum Scillæ and Acetum Urgineæ.—Both preparations are approximately twice the strength of the corresponding ones in B.P., 1898, and the dose 3 to 10 decimils (5 to 15 minims).

Acidum Citricum Dilutum.—Strength three-fifths of that of B.P., 1898.

Acidum Phosphoricum Dilutum.—Now contains 10% by weight of H_3PO_4, instead of 13.65.

Acidum Sulphuricum Dilutum.—Now contains 10% by weight of H_2SO_4, instead of 13.65.

Amyl Nitris.—Not less than 90% (instead of 70), distils below 100°.

Emplastrum Belladonnæ.—Contains 0.25% of the alkaloids of belladonna root, and so is one-half the previous strength.

Extractum Belladonnæ Liquidum.—This contains 0.75 gramme of the alkaloids of belladonna root in 100 millilitres (100 minims contain ¾ grain).

Extractum Belladonæ Siccum.—Contains 1% of the alkaloids of belladonna leaves.

Extractum Hyoscyami.—Standardized to contain 0.3% of alkaloid.

Extractum Nucis Vomicæ Siccum.—This, in powder form, contains 5% of strychnine. Calcium phosphate is the diluent.

Ferri Carbonas Saccharatus.—Ferrous carbonate now 50 instead of 33%. Dose 10 to 30 grains.

Ferri Phosphas Saccharatus.—Ferrous phosphate now 60 instead of 47%. Dose 5 to 10 grains.

Injectio Cocainæ Hypodermica.—Strength has been reduced by one-half. Contains 5 grammes of cocaine hydrochloride in 100 millilitres.

Injectio Morphinæ Hypodermica.—Strength has been reduced by one-half. Contains 2.5 grammes of morphine tartrate in 100 millilitres.

Linimentum Hydrargyri.—Now contains three-fifths of the proportion of mercury.

Liquor Ferri Perchloridi Fortis.—The proportion of iron is now 20% instead of 22% w/v.

Liquor Hydrargyri Perchloridi.—100 millilitres contain 0.1 gramme of mercuric chloride, so strength 1 in 1000 instead of as formerly 1 in 875.

Liquor Potassæ. — This solution contains 5 grammes KOH in 100 millilitres.

Pilula Phosphori.—Contains 1% of phosphorus, consequently is one half the strength of 1898.

Potassa Caustica.—Now contains 85% of KOH, instead of 90%.

Spiritus Etheris Nitrosi.—Minimum percentage of ethyl nitrite has been reduced from 2 to 1.52.

Spiritus Juniperi.—The strength of this has been doubled. Dose 3 to 12 decimils (5 to 20 minims).

Syrupus Chloral.—10 millilitres of this syrup contain 2 grammes of chloral hydrate, thus increasing the strength by nearly one-tenth.

Syrupus Codeinæ Phosphatis.—10 millilitres of this syrup contain 0.7 gramme of ferrous iodide, thus increasing the strength by about one-tenth.

Tabellæ Trinitrini.—Each tablet contains 0.5 milligram (about 1-130th grain) of the trinitroglycerin of commerce.

Tinctura Aconiti.—Strength approximates to that of the International Agreement, and is twice as strong as in B.P., 1898.

Tinctura Belladonnæ.—Now made from the dried leaves, and contains seven-tenths of the proportion of alkaloids formerly present.

Tinctura Camphoræ Composita.—This contains 5 milligrams of anhydrous morphine in 10 millilitres (one fluid drachm contains 1-27th grain). It has one-tenth more morphine than in B.P., 1898, and one-tenth more morphine than in the tinctura opii benzoica of the Agreement.

Tinctura Colchici.—Strength has been reduced to one-half.

Tinctura Digitalis.—Strength is approximately that of the International Agreement, and is about four-fifths of that of B.P., 1898.

Tinctura Nucis Vomicæ.—Strength has been reduced to one-half. Each millilitre contains 1.25 milligrams of strychnine; each fluid drachm contains 1-16th grain. Dose 3 to 10 decimils (5 to 15 minims).

Tinctura Opii.—This is now standardized to contain 1% of morphine; it is now about one-third stronger. Dose 5 to 10 decimils (repeated), 12 to 18 decimils (single); or 5 to 15 minims (repeated), 20 to 30 minims (single).

Tinctura Opii Ammoniata.—Strength of morphine 1:1000, and now contains 10% less morphine.

Tinctura Picrorhizæ.—Is now twice the former strength.

Tinctura Strophanthi.—Particular note must be made of this, as it is now four times stronger than before, there being four times the proportion of strophanthus seeds. It is about the same strength as the tinctura strophanthi of the International Agreement, but in the latter the seeds are not treated with ether to remove the fat and resins

N.B.—Dose 12 to 50 centimils (2 to 5 minims).

Trochiscus Acidi Carbolici.—Reduced in strength by one-half.

Unguentum Hydrargyri.—Percentage of mercury is now 30 instead of 50.

Unguentum Hydrargyri Ammoniati.—Now one-half its former strength.

Unguentum Hydrargyri Compositum.—Now three-fifths its former strength.

Unguentum Hydrargyri Subchloridi.—Is doubled in strength.

Vinum Antimoniale.—Is now one-seventh stronger.

Vinum Aurantii.—Contains 15 to 17% by volume of ethyl hydroxide, instead of 10 to 12.

COLOUR SENSE IN RELATION TO NERVOUS STAMMER.

By **G. H. Taylor, L.R.C.P. (Ed.), L.R.C.S. (Ed.),**
Medical Officer, New South Wales Government Railways and Tramways, Sydney.

During the past seven years, 60,000 candidates for employment in the railway service of the State of New South Wales have been examined in my office, the examination in each case including a test for colour sense by Holmgren's wools and the Williams' lantern, and during the past five years by the modified Williams' lantern; 0.18 per cent. of these candidates had a nervous stammer sufficiently in evidence to impair their usefulness as railway servants, and to reject them. I can recall no instance in which a man rejected for a nervous stammer was also found to be red-green-blind. During the past three years I have carefully watched for such a combination. There is a complete record of all cases examined in this office. In one case only was a man rejected for defective colour sense who also had a nervous stammer. He was normal by Holmgren's wools, but he named pale green-white in the lantern. Unfortunately at that time I had no knowledge of the value of either Stilling's or Nagel's test, and therefore cannot state the real value of his colour defect. From this evidence it is at least probable that a nervous stammer is much rarer in colour-blind persons than in colour-normal persons.

Reports of Cases.

A CASE OF HYPERNEPHROMA.*

By **G. P. Stanley, M.B. (Syd.),**
Tamworth, N.S.W.

On April 6, 1914, I was called to Mrs. S. The patient, who was 47 years of age, complained of great pain in the abdomen, and dull aching pain in the lumbar region. The family history revealed that her mother had died of drowning, and that her father was alive and healthy at the age of 76 years. As far as could be ascertained, no case of cancer had occurred in any of her near relatives.

The patient stated that she had felt weak and ill for a period of about four months. Nine days previously she noticed that her urine was blood-stained.

An examination led to the conclusion that the abdominal pain was due to the presence of a blood clot in the bladder, and that the kidney was enlarged. She was admitted to the hospital. The hæmaturia continued for nine days, and for the following four days the urine was clear, but contained a trace of albumin, which was demonstrated by the heat test. The hæmorrhage started again at the end of this period, bright blood being passed, and a blood cast of the ureter was found in the fluid. Two days later she was submitted to operation. The kidney was removed. The patient stood the operation well, and made a good and complete recovery. When last seen she was quite well, and there were no indications of any recurrence or metastases. A portion of the kidney was sent to the Bureau of Microbiology at Sydney for examination and report. It proved to be a hypernephroma, with commencing degeneration of the glandular cells.

Tumours of the kidney may be divided into the malignant and the benign. To the former, which forms by far the larger class, may be assigned the carcinomata, the sarcomata, and the hypernephromata, or supra-renal inclusion tumours. Hypernephromata consist in the growth of aberrant adrenal gland masses within the substance of the kidney. On microscopical examination they show a structure similar to that of adrenal gland. On section they are either canary yellow or flesh-coloured. Although, as a rule, uniform on section, they may show softened areas and hæmorrhages. They are usually rounded in outline, and form protrusions covered by kidney capsule. As a rule the tumour mass is separate and distinct from the kidney tissue. When small they are almost always confined to the cortical substance or medulla. Either pole of the kidney may be affected. As it grows the tumour reaches the pelvis, and may extend along the veins, even to the vena cava. Small hypernephromata may be clinically non-malignant. Larger growths tend to metastases most frequently in the lung, liver and long bones. A number of tumours which have been supposed to be primary sarcomata of bones, have, after operation, been shown to be metastases from undiscovered hypernephromata. Hypernephromata have on very rare occasions been known to occur in the adrenal gland, liver and uterus. They form about 17 per cent. of all kidney tumours. Malignant tumours of the kidney may remain latent for a considerable length of time. Until a tumour is detected by physical examination hæmaturia and pain are the chief factors directing attention to the kidney. Hæmaturia, with or without renal colic, is the most constant symptom. The hæmorrhage is profuse, and comes on in attacks ending as suddenly as they begin. In hypernephromata intervals as long as five years have been observed between attacks. Other changes in the urine are somewhat infrequent. Pain is an almost constant symptom in adults, and is generally of a dull and aching character. In the later stages it may be due to pressure or venous obstruction, varicocele or œdema of the lower extremities.

The treatment can consist only of nephrectomy. Contra indications to this operation exist in marked fixation of the tumour, and in the presence of metastases. The long bones must be examined carefully, and vague pain in them must be regarded with suspicion of an existing metastasis.

Treves (Ed. 1896) does not mention the work hypernephroma, but says that many so-called tumours of the kidney arise in connexion with the supra-renal bodies and not the kidney proper. He also states that many malignant tumours of the kidney possess a structure similar to that of the zona fasciculata of the supra-renal capsule.

Guiteras (Urology, Ed. 1912) says that the tumour generally occupies the upper pole of the kidney, and that it is usually small, about the size of a pea. It is only at an advanced period of life, about 45 years, that it reaches a size sufficient for recognition. He points out that metastasis almost always occurs through the venous circulation, while the lymphatic system escapes. The symptoms are the same as in other malignant growths, but it is very characteristic of hypernephroma that it does not give rise to any symptoms before the 50th year. Hæmorrhages occur spontaneously and cease suddenly; while casts of the ureter are common. The prognosis is always doubtful. The disease may remain latent for an indefinite period, or it

* Read before a meeting of the Northern District Medical Association at Tamworth on July 15, 1914.

may suddenly enlarge. It is generally fatal in less than three years. The surgical prognosis is far from favourable.

Cheyne and Burghard (Ed. 1903) do not mention the condition.

The most recent work in connexion with this condition tends to show that it is by no means certain that the growths are derived from supra-renal cells. It is quite possible that the term hypernephroma includes a number of pathological entities. A better and more complete classification is required before the pathology of these tumours is properly understood.

A CASE OF CHLORODYNE HABIT.

By **S. J. Richards, M.B., M.S., (Syd.),**
Mount Morgan, Queensland.

The following case appears to me to be worthy of record on account of the extremely large quantities of narcotic poison taken by the patient.

The husband of the patient learned through her sister that his wife was a chlorodyne drinker. She had employed her two little boys to purchase the drug, chiefly at general stores; and, unfortunately, they had been loyal to her in keeping the secret from their father. The habit had been going on, as she admitted to me, for about two years, and she carefully made away with the empty bottles "for a long time." Under treatment, she recovered, after a severe period of weakness and insomnia. It appears that the garden surrounding the patient's house was in a weedy condition, and covered about a quarter of an acre. I had the garden searched for empty bottles, and this is the collection they showed me next day:—

100	18	fluid drachm bottles	costing 4/6 each.
132	8	fluid drachm bottles	costing 2/9 each.
708	3	fluid drachm bottles	costing 1/3 each.

All these bottles had wrappers unstained by the weather, evidently recently used. These bottles alone account for 622½ fluid ounces, and a sum of £84 18s. The patient told me that for a considerable time she had taken a large bottle every day, and sometimes two. The husband noticed that his wife was not in good health, and had several times suggested calling me in. This she objected to do, though I attended her for a confinement during this year, when I must admit I did not suspect her of morphinism.

Reviews.

A TUBERCULOSIS HANDBOOK.

Dr. Burton has written an excellent little book for nurses(1) and other workers engaged in the crusade against tuberculosis. This book is intended primarily for the instruction of the trained nurse, but its clear, simple language and freedom from all unnecessary technical terms, bring it well within the comprehension of any intelligent person interested in the work. After a short introductory note on bacteriology and immunity, the author proceeds to deal briefly, but most effectively, with each practical and theoretical aspect of the subject. One section only calls for adverse criticism, namely, that on laryngeal tuberculosis. The description of this condition, of which, as a hopeless disease, popular dread is already excessive, is much too gloomy. No mention is made of the well-known fact that it is a more frequent and symptomless complication than was formerly supposed of early and moderately advanced cases of pulmonary tuberculosis, and that it can be completely or partly cured in many cases, although an essential factor in the treatment is the stern measure of complete silence for a long period. Emphasis should be laid upon the improved prognosis in tuberculosis of the larynx during recent years, and upon the importance of the co-operation of a kind but firm nurse in helping the patient to live his wearisome life of silence. He requires all the fortitude and hopefulness he can command, and nothing could be worse for him than that his nurse or visitor should be instructed only in the hopelessness and pain of advanced laryngeal tuberculosis. The "Tuberculosis Handbook" is designed especially to instruct workers in England, but it can be most warmly recommended to all nurses as having well accomplished its author's purpose "to give as concisely as possible those facts about tuberculosis which . . . nurses engaged in this special work should be familiar with."

(1) "The Tuberculosis Handbook for Health Visitors and Nurses," by A. H. G. Burton, M.D., D.P.H., 1914. London: The Scientific Press, Ltd.; Crown 8vo., pp. 55, Illustrated.

OPHTHALMOLOGY.

The appearance of the seventh edition of "Diseases of the Eye," by de Schweinitz (1), three years after the last edition, may be taken as some indication of the well-deserved popularity of this handbook, and of the necessity of bringing text books up to date.

Among the new matter is a description of the Schiötz tonometer, the use of which the author advocates, as, by means of this instrument, increased tension can be demonstrated in the majority of cases of chronic glaucoma. He does not mention, however, that abrasions of the cornea have been caused by its use. Elliot's trephining operation is described, and has given the author satisfaction in chronic or secondary glaucoma.

A short account is given of the serious visional disturbances following the use of atoxyl and other aryolarsenates. Salvarsan, the author definitely states, does not cause blindness. Seigert's method of local anæsthesia is described, but the author does not evince much enthusiasm over its use for enucleation and similar operations. Of new operations, Reese's muscle resection and Toti's dacryocystorhinostomia are well described.

Vaccine treatment is recommended for gonorrhœal iritis and other conditions, but should be regarded as supplementary to other forms of treatment. No pains have been spared in making this handbook both instructive and interesting to students or ophthalmologists. The paper, print, illustrations and the index are all excellent.

(1) Diseases of the Eye. A handbook of ophthalmic practice for students and practitioners, by G. E. de Schweinitz, A.M., M.D., Professor of Ophthalmology in the University of Pennsylvania, etc. VII. Edition, thoroughly revised, 1913. Philadelphia and London: W. B. Saunders Company; Melbourne: James Little; 8vo., pp. 979; 360 illustrations and 7 plates; 21s.

Notes on Books.

A PHOTOGRAPHIC POCKET BOOK.

The 1915 edition of the "Wellcome" Photographic Exposure Record and Diary contains a considerable amount of information which will be found useful by the amateur photographer. This record increases in size and practical value year by year, and in view of its low cost and carefully compiled contents should meet with a ready sale. In addition to the information given in regard to such subjects as the colour toning of bromides, the method of using flashlight powder, and of obtaining satisfactory negatives, the book contains an exposure calculator of considerable ingenuity. The record may be obtained from all photographic dealers and book-sellers, at 1s. 3d. (1s. 5d. post free).

The College of Physicians of Philadelphia is prepared to receive essays for competition for the Alvarenga Prize for 1915. The prize is worth $250, and will be awarded on July 14, 1915. The essays, which may be on any subject in medicine, must be typewritten and unsigned, but marked with a motto. A sealed envelope, bearing the same motto on the outside, and enclosing the name and address of the author, must accompany the essay. If written in any other language than English, the typescript should be accompanied by a translation. It should be received by the Secretary of the College not later than May 1, 1915. The successful essay will remain in the possession of the College.

The Alvarenga Prize for 1914 has been awarded to Dr. H. B. Sheffield, of New York, for his essay entitled "Idiocy and Allied Mental Deficiencies in Infancy and Early Childhood."

Medical Journal of Australia.

SATURDAY, DECEMBER 19, 1914.

The Care of Infants.

During the year 1913, 78.3 deaths of infants under one year of age per 1000 births took place in New South Wales. This infantile death-rate must be regarded as a highly satisfactory one, albeit that lower rates have been recorded in other States in Australasia. The lowest rate recorded during 1913 was 59.2 in New Zealand, while in Western Australia it was 70.0. On the other hand, the rate was as low as 69.5 in 1911 in New South Wales, and 71.3 in 1912. The figures for Sydney are approximately the same. In order to appreciate the significance of these recorded rates, it is necessary to compare them with those of countries in other parts of the world. In Ceylon the rate was 215, in Hungary it was 186, in Prussia it was 146 and in Ontario it was 110 during the year 1912. Another method of examining the effect of the various factors conducing to the safety of infantile life may be adopted. In Sydney, the infantile death-rate has fallen from 174.0 in the period 1880-1884 to 78.3 in 1913, while for the whole State it has fallen from 120.4 to 78.3 in the same period. On the other hand, during the last five years, the mortality of infants under one month has remained more or less stationary, and the rate among the illegitimate infants up to the age of five had been nearly twice that among the legitimate children. We are faced with a problem which may be stated as follows. One infant out of every 46 born in New South Wales dies within the first week of life, and one infant out of every 14 dies within the first year of life. Close on one quarter of these deaths are occasioned by diarrhœa and gastro-enteritis, while about one-sixth are due to premature birth. Syphilis is not a frequent cause of death, but, in spite of this, the infants born out of wedlock are unfavourably placed as compared with those born of married parents. In other words, conditions which are largely due to a lack of proper care of both the mothers and their infants are responsible for the appalling loss of life within the early period of mundane existence.

This problem has been occupying the attention of hygienists all over the world for many years A satisfactory result has followed well-planned and logically-thought-out measures whenever they have been applied. In no situation has it hitherto been possible to drive out ignorance and superstition in the management of babies.

In New South Wales a series of measures have been adopted to improve the existing state of affairs. The Minister for Public Health has associated himself intimately with the welfare of the babies of the State, and a large portion of his health programme has this end in view. In the first place, the policy of looking after young mothers has been instituted, in order that future babies may not participate in the exhaustion born of the necessity of working after the trying experience of a parturition. In a short space of time, a convalescent home will be opened in Rose Bay, where post-parturient women of the working class can rest for a while, under almost ideal conditions, to recoup their lost strength, to recover from a not infrequent anæmia, and to avoid a too early return to the ceaseless drudgery and hard domestic work, under conditions which are neither sanitary nor health-giving. This part of the programme must command universal approval, in that the State is to provide at a low cost what the individual cannot under any circumstances afford, but what she stands in sore need of.

The second step toward the improvement of the infant is associated with an undertaking which appears in the programme under another rubric. This is the Infant Clinic, at which expectant mothers are advised in regard to the best means of keeping well and of safeguarding the lives of their unborn infants. The women attending these clinics for this purpose are not numerous at present. The nurses in charge are attempting to persuade as many as possible to come; in all cases, the women belong to the poorer sections of the community, and are not likely to receive this kind of advice from any other source. In close connexion with this part of the activity of the clinic there are the Bush Nursing Scheme and the provision of midwifery nurses. The former has been planned in such a manner that a nurse is made available for women resident in districts in which no medical practitioner is near at

hand. She holds in each case a midwife's, as well as a general nurse's, certificate, and by dint of keeping in touch with the whole of the wage-earning population of her district, she has exceptional opportunities for handling the expectant mother and guiding her into a hygienic and safe road. Ten nurses are at present working to the satisfaction of the Department, and the appointment of ten others is being contemplated. The degree of success of their work must depend primarly on their individual knowledge and skill as nurses and midwives, and on their powers of persuasion. Women have more to unlearn in regard to personal hygiene and the care of infants than to learn, and for this reason it would be economy to engage the services of cultured and highly-trained ladies for this work, rather than of nurses whose professional qualifications merely satisfy the minimum requirements.

Fears have been expressed in medical circles that the Department entertained the proposal of establishing an elaborate system of gratuitous midwifery assistance. These fears are not justified in fact. There is a suggestion which will in all probability find fulfilment, that nurses trained as midwives should be employed in a few districts to render assistance to women in child-birth under very definite, and, to our mind, rational limitations. The patients to whom this succour is to be tendered are of that class which cannot afford to pay the practitioner a fee for attendance. Under ordinary conditions, these patients are confined in a hospital or other charitable institution, but when accommodation cannot be found for them, or when it is ascertained that the lying-in can be safely and more economically conducted at the patient's own home, this assistance will be offered. Apart from these helpful measures, arrangements are being made for the trial of an interesting experiment. A lady, well-trained in domestic arts, will attend at the houses of lying-in women of the labouring classes, to undertake the housework of the young mother, during the time when she is kept in bed. This work has been carried out with signal success and without any noise in English cities by trained lady health visitors, who devote time and energy to the assistance of the work of the homes for mothers, infant consultations and similar eleemosynary institutions.

The next step toward the safeguarding of the infant is a double one, and consists in the establishment of Infant Clinics and of an Infant Hospital. We hope to publish a short description of the equipment of, and the work conducted in, the Lady Edeline Hospital for Babies at Vaucluse in another issue, and content ourselves with the passing announcement that this institution is proving itself of the highest value to the babies of Sydney, and bids fair to gain a reputation of being a model infants' hospital.

At present, there are but two Governmental Infant Clinics. They are situated in Alexandria and in Newtown. In the near future, three others will be opened, or rather taken over, namely, the home in Bourke Street, Woolloomooloo, one in Rozelle, and one in Balmain. These clinics are simplicity itself. No excessive equipment is to be found in the almost humble rooms, and temporarily bare necessities have to suffice for conducting the work, until experience has taught what factors will tend to improve on the results already obtained. In the two existing clinics, two rooms of small dimensions have been engaged in a small, but clean, house. The front room in each case is the clinic proper, while the back room serves as a waiting-room for the mothers and their infants. A table with scales for weighing the babies, books and cards for the keeping of records and a very limited number of simple mixtures complete the stock-in-trade. The valuable asset in each instance is a nurse of undoubted capabilities, of great kenness, technically well-trained, and endowed with the one essential for work of this sort—common-sense and knowledge of the world. Such is the equipment of the Babies' Clinics, and it is sufficient to attain results as excellent as those obtained by Eric Pritchard, the late Budin, Rietschell and other European pioneers. The nurse is assisted by one capable assistant nurse, and, apart from the duties in the clinic itself, which is open at fixed times, visits are made to the homes of the parents, in order that the influence may be extended and followed up, and the utility of the institutions may prove of permanent value.

The infants brought to the clinics are either normal infants, or infants who need nursing and care rather than medical attention. Really sick babies

do not belong in the clinic, but provided that they are sent by medical practitioners, with instructions to the nurse in regard to the treatment required, or are referred there from hospitals, or lastly are discovered by the nurses untreated and without any prospect of receiving treatment elsewhere, babies with definite signs of illness of a non-infective nature are dealt with. The principle that the treatment of sick babies must be directed by a medical practitioner is never departed from. If the patient is sent by a private practitioner or a Lodge doctor, the nurse reports progress to him, and receives her instructions exclusively from him. Cases referred from hospitals, and those received without any medical instructions are seen by the medical officer of the clinic, and the treatment ordered by him is followed. In minor matters, especially affecting infants who do not thrive, or who are obviously being improperly fed, the nurse uses her discretion as to whether the patient should be regarded as ill, and therefore referred to a medical practitioner, or whether improvement will follow if the defective care is remedied by her own instructions and assistance.

The Board of Health has determined not to appoint any medical officers to the institutions under its care, save after public advertisement and a careful selection of the candidates applying for the positions. In this selection, we have reason to believe, the only recommendation which will weigh with the Board will be that of experience and efficiency. The Board has recognized that the appointment of a young practitioner of ordinary attainments, but without any special experience in the subject of the disease and management of infants, would be little short of a scandal. This method, although adopted in some places, will not be tolerated in the Commonwealth.

In the infant consultation department at the St. Marylebone General Dispensary in London, the equipment as far as drugs and preparations are concerned is as follows: "Marylebone Cream," a cream substitute for cod liver oil; petroleum emulsion, the only preparation used for the treatment of constipation; thymol lotion, in the systematic syringing of the nose and naso-pharynx for the prevention of adenoids; banana flour; rennet tablets; citrate of sodium tablets; alterative tablets; and diarrhœa tablets. In addition, there is a simple but excellent form of dried milk, prepared by spraying pure, fresh milk into interior of large sterile rotating metal cylinders, heated to about 60° C. The water is evaporated almost instantaneously, and the milk falls to the bottom of the cylinder in the form of a fine, dried powder. With this extremely modest equipment, Dr. Eric Pritchard has achieved marked success among the infants of a very poor quarter of London. In other parts of London and various European cities similar results have been attained. The Department of Public Health in New South Wales will, no doubt, succeed in reducing the incidence of gastritis, enteritis, malnutrition and other causes of death in infants by means of these various measures, provided that it has the wholehearted support of the profession.

———o———

THE NEW EDITION OF THE PHARMACOPŒIA.

The issue of a new edition of the British Pharmacopœia is a matter of considerable moment to the members of the medical and pharmaceutical professions. After 17 years, the changes in materia medica are bound to be considerable, and, as will be seen in the article published in this week's issue by Dr. Cuthbert Hall, and also in an article published on page 590, that the alterations in the 1915 edition are numerous and material. In view of the fact that no copies of the pharmacopœia are at present available, it becomes a matter of impossibility for medical practitioners to render themselves familiar with the modified dosage of the altered preparations, and for pharmacists to standardize their tinctures, extracts and other preparations by the beginning of the new year. Under these circumstances, the various Governments have been approached with the view of allowing a term of grace to elapse before the adoption of the new edition is enforced. We are informed that this period of grace will be granted in New South Wales, and we have reason to believe that in other States a similar concession will be accorded. Should such a period of grace not be granted throughout the Commonwealth, it will be advisable for practitioners to mark all their prescriptions during the early months of 1915 "to be dispensed according to the British Pharmacoœpia of 1898," in order that an understanding between the prescriber and the dispenser may be arrived at. We would draw the attention of practitioners to the fact that, while the strength of the new tincture of digitalis and that of nux vomica is less strong than previously, the strength of the tincture of opium and of the compound tincture of camphor is stronger. Each preparation must be studied carefully.

Abstracts from Current Medical Literature.

OPHTHALMOLOGY.

(237) Optic Atrophy in Tabes.

Kingsley ("The Ophthalmoscope," September, 1914) claims that, whereas atoxyl, hectine, etc., do harm rather than good, the discovery of 606 has improved the outlook for optic atrophy. The favourable cases are those in which the visual acuity has not diminished below 1/10, and is associated with fair perception of colours, otherwise the prognosis is bad. The treatment should be local and general. Galvanism for 10 to 20 minutes daily is applied with a 5 to 8 ampères current. Subconjunctival injections of sodium chloride (5 to 10%) or of cyanide of mercury (1 in 500) are given. In addition, he gives strychnine injections (0.001 to 0.005 gramme) daily for 20 injections. He insists on the patient taking rest from work, and wearing coloured glasses. Intravenous injections of neosalvarsan are given in a series of from 6 to 8, with an interval of 6 to 7 days between each injection, beginning with 0.03 g. and increasing up to 0.06 g. At the same time, 0.01 to 0.03 g. of pilocarpine, twice a week or 1 to 2 g. of aspirin daily with hot water and purgatives, are also administered. Four cases are described in more detail.

(238) Sclero-corneal Trephining.

Elliot ("The Ophthalmoscope," October, 1914) claims that the vesicular type of filtration scar, which renders the eye liable to late infection, may be prevented by correct technique. The upper incision of the flap should be broad and placed near the fornix, but the dissection downwards should be triangular, gradually narrowing below until it reaches the cornea. Here the space should be just sufficient for manipulation. The upper part of the flap should consist of conjunctiva alone, more subconjunctival tissue being added to the flap as the cornea is approached. Lastly, the cornea must be split, in such a manner that the covering for the trephine hole is the thickest part. The impaction of uveal tissue in the trephine hole is one of the gravest misfortunes. The author considers that an iridectomy should always be performed if possible, and prefers a botton-hole iridectomy opposite the trephine hole. Atropine should be freely used in the after treatment, beginning 48 or 24 hours after operation. The result obtained may be controlled by a correct gradation of the piece of sclera removed. For a very chronic glaucoma, the removal of one-third of a 2 mm. disc will be sufficient to maintain normal tension, while in a more acute case a larger amount of sclera must be removed. The trephine should always be made to cut through the corneal edge first. When this is done, the disc, hinged on its scleral side, will be pushed forward by the prolapsing bead of iris. Usually, the whole disc and the piece of iris are removed by one snip of the scissors. It is possible, if so desired, to remove only part of the disc. The number of late infections recorded is not surprisingly large in view of the considerable number of cases operated upon. The risks are greatly reduced by correct technique. The possibility of a fistula in the conjunctival incision should be borne in mind. It is cured by applying a solution of silver nitrate.

(239) Symmetrical Occlusion of the Pupils.

Week ("Archives of Ophthalmology," September, 1914) records the case of a lady, aged 28, who was suffering from symmetrical occlusion of the pupils, due to the development of cysts and small, solid masses attached to the uveal layer of the iris. When the patient was 11 years old, pigmented masses were discovered in her pupils, and a bad prognosis was given. When 18 she was reported to have ectropion of the edges of the iris in both eyes, with vision 6/16 and 6/12. When seen by the author, the vision was 20/50 and p.l. Each pupil was occluded by small pigmented masses, varying in size. The left eye was first operated on. An incision was made in the corneal limbus above. As all efforts to remove the masses alone failed, a liberal iridectomy was performed. There was no evidence of synæchiæ. The process of healing was uneventful. A few days later the right eye was operated on. Two of the larger masses at the lower margin of the pupil were divided from the iris by means of a Graefe's knife introduced at the limbus on the temporal side. Another incision, 8 mm. long, was then made at the limbus above, and a broad piece of iris removed, including two of the masses. The vision two months later was 20/20 in each eye. On examination, the masses appeared to be developments of cysts of the pigment layer of the iris.

(240) Psammo-sarcoma of the Orbit.

De Schweinitz records a case of psammo-sarcoma of the orbit. The patient consulted him for a growth above the left eye ("Arch. Ophthalm.," Sept., 1914). It had been growing for two-and-a-half years. The vision was normal, as were the ocular movements. The eyeball was displaced downwards and slightly outwards, and was 7 mm. below the level of the right eye. At the upper and inner portion of the orbit was a dense growth. A radiogram showed that part of the roof of the orbit was pushed upward and to the right, and the left frontal sinuses were obliterated. A curved incision was made from the centre of the eyebrow, along the inner side of the nose to a point opposite the inner commissure. On dissecting the tissues downwards, a bony capsule was exposed. This was opened with a chisel along the orbital margin and the nasal side. Clear fluid and brain-like tissue were removed. The bony capsule was then removed piece by piece, and was found to be entirely outside the muscle cone. The cavity left, as large as a small egg, was drained by a tube, and the wound closed. The only post-operative complication was diplopia from paresis of the left superior oblique. The material preserved for microscopical examination was pronounced to be a psammo-sarcoma.

(241) The Convergence Index as a Measure of the Converging Power.

Duane ("Arch. Ophthalm.," Sept., 1914) considers the determination of converging power by the prism, base out, which the patient can overcome is only approximate, and should be called the prism-convergence. The converging power, measured by the convergence near point, is the most reliable. A trial frame is placed on the patient, and so adjusted as to be 11.5 mm. in front of the cornea. A millimetre scale is held perpendicular to the plane of the trial frame, where it crosses the nose, and along this a pin, with a white head, is carried towards the patient's nose, the patient being told to converge on it. When the object doubles or one eye diverges, the distance is noted. This distance, plus 25 mm., equals the distance of the convergence near points from the inter-central base line—that is, the line joining the centres of relation of the two eyes. But the convergence varies also with the interpupillary distance, so the converging power is given by the fraction $\frac{\frac{1}{2}\ Pd}{Pc\ B}$ where Pd is the pupillary distance and Pc B the convergence distance. This ratio, multiplied by 100, gives the convergence index. This index usually ranges between 35 and 50, one below 30 means actual convergence insufficiency. Computation of many indices shows that for all values ordinarily met with, the actual converging power in degrees equals the convergence index plus 3°.

LARYNGOLOGY AND OTOLOGY.

(242) The Treatment of Cleft Palate.

Francis W. Goyder discusses at some length the embryology, anatomical forms and treatment of cleft palate, and illustrated the various points in his reasoning by excellent pictures and diagrams ("Brit. Journ. Surg.," Oct., 1913). On the basis of his anatomical investigations, he comes to the following conclusion: Cleft palate is a developmental anomaly. Early operation must not damage the structures concerned, so as to interfere with their subsequent development. Mal-developments of the antrum are not prevented by early operations for cleft palate. Any interference with the normal development of the teeth may result in mal-development of the antrum. After considering a number of points both in connexion with the developmental aspect of the question and with the clinical, he deduces that the patient, being about three years old, and all the mechanical and nutritional factors being favourable, the evidence points strongly to the employment of a median, rather than a flap, operation. In children under three, with a complete cleft, the lip should be closed

as soon as possible; no operation should be performed on the palate until the alveolar margins are nearly or quite in contact. Before the age of three, in cases where Langenbeck's operation cannot be performed without prejudice to the subsequent speech, it is unlikely that a good result will be obtained from Lane's method. Unless a good result, both anatomically and functionally, can be anticipated with some certainty, the surgeon should wait until the conditions are favourable for the performance of Langenbeck's operation.

(243) Common Disorders of the Nose.

Macleod Yearsley ("Practitioner," Oct., 1914) discusses the methods of examination and the correct treatment of common disorders of the nose as a guide to the general practitioner. The patient should be placed on a high-backed chair, and the examination conducted by means of a good, reflected light. He prefers Thudicum's speculum. This instrument should be held between the left thumb and first two fingers, the little finger resting on the forehead and the ring finger upon the bridge of the nose. The right hand should be free for manipulations. A little practice is required for the recognition of the various structures. In the next place, posterior rhinoscopy is difficult at first, but is essential, and can be rendered comparatively easy if gentleness and care be exercised. A small laryngeal mirror, measuring from three-eighths to five-eighths of an inch in diameter is used. The patient should breathe through the nose, with the mouth wide open and the tongue depressed. The mirror is then passed under the soft palate, care being taken that neither the uvula nor the posterior wall of the pharynx is touched. A better view is obtainable by means of Holmes's electric naso-pharyngoscope, which is passed through the nose, like a Eustacian catheter. In dealing with obstructions, the cause may be found in the septum, in the tubinates, or in the naso-pharynx. Septal deviations and spurs may be found in any situation, and may be placed so far back as to be seen only when the nose is cocained. Septal deviations of moderate degree frequently produce no symptoms; on the other hand small, posterior spurs may give rise to chronic middle ear catarrh. The symptoms of obstruction include headache, and the results of continuous mouth breathing. Nasal asthma is frequently associated with marked deviation of the septum. The treatment of defective drainage and acute rhinitis should consist of the operative removal of the obstruction, vaccines, and local treatment. Patients should be warned not to blow their noses too vigorously during a cold, on accord of the risk of infecting the middle ear. In chronic hypertrophic rhinitis, which is frequently associated with adenoids, severe septal deviation, and chronic suppuration of the accessory sinuses, the nasal mucous-membrane appears congested, and the hypertrophy may extend over the anterior and posterior ends of the inferior turbinate. The nose should be examined under cocaine and adrenalin, in order to distinguish this condition from vascular turgescence. In examining for nasal obstruction, polypi may be found springing from the middle turbinate. At times, a solitary polypus may be situated in the naso-pharynx. In all these cases, the accessory sinuses should be examined. Turning to the question of purulent discharge, the author states that a unilateral discharge usually signifies disease of one or more of the accessory cavities, or in children, a foreign body. The diagnosis of the affection of the accessory sinuses is based on the presence of discharge, and of tenderness, on the result of transillumination, and on the draining of the cavity when the head is held low. Pus in the inferior meatus, especially when issuing from the middle of the middle turbinate, usually indicates an antral abscess, while pus below the anterior end of the middle turbinate usually indicates frontal sinus disease with implication of some of the ethmoidal cells. Pus high up between the septum and middle turbinate indicates sphenoidal or posterior ethmoidal suppuration. After dealing with nasal asthma, the author devotes a few words to the treatment of epistaxis. The nose should be washed out with warm normal saline, and the bleeding point sought. Hydrogen peroxide may be required before a clear view is obtained. Plugging of the posterior nares is rarely required. If necessary, a gauze plug soaked in sterilized parolein is useful, and can be applied anteriorly. For posterior plugging, he uses an ordinary sponge tent, smeared with sterilized vaseline.

(244) Intubation Instruments.

E. W. Goodall ("Practitioner," Oct., 1914) points out that the defect of O'Dwyer's intubation pilot or Bayeux's modification lies in the difficulty of withdrawing it. The pilot is made of two parts joined together by a hinge. Avirignet has introduced a very simple modification, in which the pilot consists of a steel spring permanently fixed above to the introducer, and terminating below in a bulb. The spring however, is too weak, and Goodall experienced the breaking of this spring on one occasion. He states that Moreau's instrument has a pilot which is short and hingeless, and can be released with great facility. The instrument is fitted with a whistle in the handle, which acts as soon as the tube is over the glottis, provided that the patient is breathing. He recommends this instrument, but prefers a shorter piece in the introducer, between the bolt for the pilot and the bend.

(245) The Physiology of the Semi-Circular Canals.

D. H. Ballon ("Canadian Medical Association Journal," October, 1914) contributes a very excellent record of the investigations of the functions of the semi-circular canals, from the discovery in 1842 by Flourens of the association between these canals and the sense of posture, to the time when Menière published his famous article, and thence to the time when Bárány took up the study of this subject. Bárány showed that syringing an ear with water considerably colder than the body produced dizziness and combined rotary and horizontal nystagmus away from the syringed ear. When the syringing was carried out with hot water, the movements of the eyes were towards the ear, while when water of body temperature was used, no giddiness or nystagmus was produced. When the internal ear is affected and the semi-circular canals or vestibular nerve is destroyed, the caloric reaction is absent on the side affected. Bárány further showed that the vestibular nerve is intimately connected up with the cerebellum. This connexion was made use of in his pointing reaction. The shoulder joint test is carried out as follows: The patient, with both eyes closed, stretches out his arm on a level with a shoulder, and is made to touch with his index finger that of the examiner, which is kept in a fixed position. He is then required to move the arm either vertically or horizontally, and to touch the examiner's finger again. A normal person invariably touches the point correctly. When the nerve is irritated, the pointing becomes defective. The author examines the functions of the cerebellum by the caloric reaction, noting not only the direction of the nystagmus, but also the tendency to fall when the individual stands with feet together and eyes shut. A normal person will fall toward the right when the right ear is syringed with cold water. The pointing test should be applied while the nystagmus is still active, and the error of both arms will be to the right, a V-shaped movement being described. If there is disease in the right cerebellar hemisphere, the left arm will point as in a normal individual, while the right will show an error of pointing to the left. The pointing reaction, taken together with the other tests, is of great diagnostic value in cases suppurative otitis media, tumour and traumatic conditions in the determination of the involvement of the cerebellum. Negative results do not exclude cerebellar disease.

(246) Tuberculosis of the Tonsils.

A. Philip Mitchell ("Journ. Laryngology, Rhinology and Otology," April, 1914) concludes that primary tubercular disease of the faucial tonsil is more frequent than is usually believed. In view of the frequency with which the upper deep cervical glands are infected secondarily to tuberculosis of the tonsil, the removal of the tonsil in all cases of tubercular cervical adenitis is necessary. As compared with the tonsils in cases of tubercular cervical adenitis, ordinary hypertrophied faucial tonsils are but rarely the seat of primary tuberculosis.

Contract Practice

X.

Friendly Societies in Victoria.

In December, 1912, there were 1,505 Friendly Society Lodges in Victoria. The members entitled to receive the various benefits numbered 153,921. In New South Wales, at the same time there were 1,853 lodges and 160,179 benefit members. The Victorian Societies, however, were considerably richer than the New South Wales Societies in regard both to total funds and total revenue. The expenditure was close on £2000 less than in New South Wales, in spite of the fact that the number of weeks during which sick pay was granted was greater. These bald facts suggest that the task which the Victorian Branch of the British Medical Association had before it was a peculiarly difficult one, more especially because the organization of the profession had not been developed during the closing years of last century and the opening years of the present one. The Lodges were obviously driving the medical men with a high hand, and in spite of their wealth, the undoubted abuse of the provident system, and the large number of bodies concerned, the Lodges took advantage of the isolation of the individual medical officers by paying wholly inadequate fees, and by imposing unacceptable conditions of service. It is well to point out that the benefit members of the Lodges represented very nearly one-ninth of the total population of the State in December, 1912. But these facts did not materially alter the problem to be met, nor did they call for any special machinery for the purpose of introducing reforms.

The Victorian Branch of the Association is governed by rules, drawn up in accordance with and subject to the Memorandum of Association and Articles of the British Medical Association. In their reference to medico-political work, these rules would appear to give the Branch greater latitude of action than the Memorandum of Association accords. Among the objects of the Branch are the promotion of the advancement of medical and the allied sciences, and of the advancement of the honour and interests of the profession, the promotion of fair and honourable practice, the suppression of habitual and unqualified practice, the consideration of questions of medical polity, and the furtherance of the federation of the medical profession in Australasia. The rules further provide for those other forms of activity which are implied in the omnibus clause of the Memorandum of Association of the Association. Prior to the annual meeting of the Branch in 1914, the rules provided for the publication of an organ of the Branch. Grants may be made out of the surplus of funds other than those derived from the subscriptions to the Association, to other Victorian or Australian Societies formed for the purpose of advancing medical science and the common interests of the medical profession.

Various attempts at concerted action on the part of the members of the Branch in their relations to the Friendly Society Lodges were made in the early years of this century, but a satisfactory progress was hampered by a want of unanimity, and by a lack of efficient organization. For a time the British Medical Association did not represent the profession in Victoria as fully as was necessary for the purpose of regulating contract practice. The relations between the Medical Society of Victoria and the Victorian Branch of the British Medical Association gradually became more intimate, and in the course of time the two bodies have become one organization. With this amalgamation medico-political activity sprang into existence. The conditions of contract practice in this State were but a few years ago extremely unsatisfactory. Low rates of remuneration, oppression by lay committees, the imposition of an excess of work on the lodge doctor, and the usual abuse of the contract system tended to dissatisfaction and discord.

As has already been pointed out, a stand was made against the attempt on the part of the Australian Natives' Association to enter into the realms of the Friendly Societies some years ago. This was probably the earliest attempt to regulate the relations between the medical profession and the Friendly Societies. In 1912 the Council of the Branch approached the various Friendly Societies with a view of arriving at an agreement which would be equitable and acceptable to both parties. In the meantime the Council, recognizing the advantage to the profession of the adoption of uniform conditions of contract practice, drew up a Common Form of Agreement, embodying the principle of an income limit, properly regulated conditions of service, adequate remuneration, and the introduction of mileage payment. The draft was submitted to a meeting of the Branch, and its provisions were approved of. In December, 1913, representatives of the Victorian Friendly Societies met the representatives of the Victorian Branch in conference. At this meeting, which was reported in full in the "Australian Medical Journal" of December 27, 1913, the members of the Association justified their position, pointed out the disadvantages to the members of the Friendly Societies of the conditions obtaining, and offered reasonable terms to the various Friendly Societies. At this conference no member of the Friendly Societies expressed their views. It was arranged that a subsequent meeting should be called at which the Friendly Society delegates should have an opportunity of criticizing the speeches made by the doctors, of illuminating a subject from the point of view of the lodges, and of suggesting some method whereby any differences, which might be found to exist, could be adjusted. The Council appealed time and again to the Executive of the Association of Friendly Societies of Victoria for a fulfilment of the promise to meet the doctors in conference. It is unnecessary to dwell in this place on the difficulties which were placed in the way of the meeting. Early in July, 1914, it was stated that certain Societies were anxious to withdraw from the arrangement. Be this as it may, the Council succeeded in overcoming all the difficulties, and on July 25, 1914, the second conference took place, at which the spokesmen were the delegates of the Friendly Societies. A full report of this conference has been published in the "Medical Journal of Australia," of August 8, 1914. The speeches of the majority of the delegates were not unfavourable to the demand of the Association. One exception, however, calls for mention in the case of the representative of the Ancient Order of Forresters. The case put forward by this delegate was not accepted by the medical profession as a reflection of the actual state of affairs, nor were his arguments regarded as satisfactory replies to the arguments used at the first conference. It became necessary for many of the statements to be corrected in the public press. This necessity was in so far unfortunate, that it sustained the strained feeling which had existed between the doctors and the societies concerned in the past. The outcome of the conference was a suggestion made by one of the delegates, and readily accepted by the members of the Victorian Branch. A committee of five members representing the British Medical Association and five members representing the Friendly Societies was appointed for the purpose of discussing the whole question in an amicable manner, and of drawing up a practical scheme. The Conference adjourned for four weeks, and the Committee was instructed to lose no time in sitting down to its task. In the interval, war was declared in Europe, and in view of the fact that it was held to be impossible to estimate what effect the crisis might have on the industrial classes, it was agreed that the consideration of the matters arising out of the Lodge difficulties be postponed until some future date. In his very able address delivered before the annual meeting of the Victorian Branch, and published in last week's issue of the "Medical Journal of Australia," Dr. Kenny, the retiring President, mentioned that it was "to be regretted that some of the lodge people had failed to realize the reason of the truce, and that others had affected to be free from any honourable obligation in the matter." The position at present is, therefore, that of a truce in which neither party will attempt to gain an advantage over the other. The work is being honestly, honourably, and conscientiously carried out by the Medical Officers under the old conditions, pending such time when a normal economic condition will be restored. The Victorian Branch has utilized all its energies and its organizing capabilities in order to create the machinery necessary to protect the profession and the wage-earning class for which Lodge practice was originally introduced.

The terms of the Common Form of Agreement, the draft of which is under discussion at present, are similar to those of the N. S. Wales Branch Agreement. The "member" in the wording of the Agreement includes the member of the Friendly Society, his wife, and other dependents, but excludes male children over the age of 16 years, and female children over the age of 18 years. Medical attendance is not to be accorded under the agreement for illnesses or accidents which are due to misconduct, drunkenness, or immorality of the member. Surgical operations and attendance at confinements and miscarriages are charged for, the fee being payable by the member. The members are liable for an extra charge of 2s. 6d. for night calls, and a mileage charge is made at the rate of 5s. per mile during the daytime, and 7s. 6d. during the night time for all visits to a place situated more than a fixed number of miles from the Medical Officer's residence. Lodge surgeons are to be paid at the rate of 20s. per annum for the metropolis of Melbourne and the cities of Ballarat, Bendigo and Geelong, and 26s. for other towns and the country districts. Medicine is charged extra. The income limit clause provides that no applicant shall be accepted for membership whose income, together with that of his wife's, exceeds £208 a year, and, further, that when the income of a member, together with that of his wife, shall increase beyond £312 a year he shall cease to be entitled to contract medical attendance. When a member whose income exceeds these two limits can show that on account of the large number of persons dependent on him, he is in poor circumstances, the provisions of this clause shall be waived.

THE BRITISH PHARMACOPŒIA.

The issue of a new pharmacopœia is always of great interest to medical men and pharmacists alike. Sixteen years have passed since the last revision of the British Pharmacopœia took place, in 1898, though other countries, and notably Germany, have revised theirs once or twice in that period. During this time many new substances and combinations, a number of them being synthetic compounds, have come into more or less general use, or have been on their trial, and some we think will find a permanent place in the armamentarium of the practitioner. The new pharmacopœia becomes official from January 1, 1915, and it behoves medical men and pharmacists therefore to make themselves cognizant of its alterations.

In a lengthy preface it is pointed out that that of 1914 is the fifth British Pharmacopœia, and as the help and co-operation of the Dominions overseas and of India have been received in its preparation, it may well be considered suitable for the whole British Empire. Especially is this so when it is considered that a number of the drugs and preparations of the Indian and Colonial Addendum of 1900 have been incorporated in the present issue. Those expecting a fuller recognition of the metric system will not be wholly disappointed, as it has now been employed for all pharmaceutical and analytical computations. The authorities have, however, shrunk from abandoning the Imperial system in the matter of dosage. Both this and the metric are used in stating the doses, precedence being given to the latter. Fluids are not measured in cubic centimetres, not by weight, as obtains on the Continent, but by volume in terms of a millilitre, this being defined as the volume at 4°C. of one gram of water. Following the Board of Trade regulation, the term millilitre has been shortened into "mil"—16.9 minims, while "decimil" signifies one-tenth of a millilitre (about 1.69 minims), and "centimil" one-hundredth of a millilitre (about 0.169 minims). It is a pity that abbreviations have not been suggested for decimil and centimil. No mention is made of the "scruple," and prescribers are recommended to give up the use of the "drachm" and "ounce" measures, both solid and fluid. Unfortunately the Imperial system is not likely to be abandoned in prescribing until a Weights and Measures Act is passed making the metric system the only legal one in Britain. In the preface it is stated that the doses mentioned in the pharmacopœia are not intended to be authoritative, but are a guide to the average range of quantities usually prescribed for adults. In the matter of the atomic weights values are in accordance with the agreement entered into by the International Committee on Atomic Weights. Instead of basing the atomic weights on that of Hydrogen 1, that of Oxygen 16, is adopted. A great increase is to be noted in the number of crude drugs and preparations therefrom which are required to have a standard strength of their chief ingredient or ingredients. The tests for volatile and fixed oils have been revised and brought up to date.

In accordance with the "International Agreement" made in 1906, as an outcome of the International Conference respecting the unification of the formulæ for potent drugs and preparation, in the several national pharmacopœias, some changes have been made necessary in the preparation, composition, and strength of important galenical compounds containing potent ingredients, so as to secure uniformity. Other countries have conformed to this in their recent pharmacopœias. In the new British revision the changes necessary have been usually slight, and have been indicated in the prefatory tables and footnotes. In the few instances where the recommendations have been deviated from, these are given in a separate prefatory table, with reasons for the departure.

A survey of the alterations discloses that 43 articles and preparations have been added, while 168 have been omitted, when compared with the 1898 Pharmacopœia and the Indian and Colonial Addendum, 45 of the omissions being from the latter, which contained 120 monographs. As the 1898 revision left out over 100 monographs that were in the third revision of 1885, we see that medical and pharmacy students have cause for thankfulness at the diminished strain on their memories. None of the present omissions are important. The concentrated liquors are all left out. Some drugs omitted were in the addendum, others are now described in the monographs as "of commerce," while such crude drugs as cantharis, cocae folia, and physostigmatis semina are represented by their active constituents. Considerable interest is sure to be felt in the 43 additions to the Pharmacopœia. They comprise three crude drugs, 25 chemicals, 14 galenicals, and one fat. Of most importance are the chemicals, all of which have been in use for a number of years, and have merited recognition. Seven recently introduced organic substances which may be prepared artificially are included, and for four of them new names have been adopted. The seven substances are: Acetylsalicylic acid (aspirin), barbitone (veronal), benzamine lactate (beta eucaine lactate), chloral formamide (chloralamide), diamorphine hydrochloride (heroin hydrochloride), hexamine (urotropine), and phenolphthalein (purgen). Other artificial organic chemicals introduced are ethyl chloride, picric acid, guaiacol, guaiacol carbonate, formaldehyde, methyl-salicylate, methyl-sulphonal (trional), and resorcin. When the last German Pharmacopœia was issued strong exception was taken to the fact that a large number of these synthetic compounds were put in under their trade names, thus giving certain German firms an altogether unfair advantage. In the new B.P. this has been avoided, everyone being granted fair play. Some exception might, however, be taken to the new names coined. The British Pharmaceutical Codex introduced, in 1907, barbitone, benzamine, and diamorphine, under the names of malourea, betacaine and acetomorphine, and it is a pity that these have not been retained, and the multiplicity of names thus saved. The term benzamine is liable to be confused with benzylamine and benzocaine, and it departs from the useful rule of making local anæsthetics with names ending in "aine." Active principles and their preparations which have been added to the pharmacopœia are adrenalin, liquor adrenalini hydrochlorici, cantharidin and acetum, emplastrum, tinctura and unguentum cantharidini, injectio strychninæ hypodermica, pelletierinæ tannas, and theobrominæ et sodii salicylas (diuretin). Metallic salts that are new are calcii lactus, ferri phosphas saccharatus, sodii phosphas acidus, strontii bromidum, and zinci oleostearas, Other additions are acetonum, acidum hydriodicum, syrupus acidi hydriodici, cassiæ fructus, cresol, liquor cresol, saponatus (lysol), glucosum, Ipomœæ radix, senæ fructus (senna pods), sevum benzoatum, ungt. lanæ co. and ungt.

plumbi subacetatis. Particular attention must be given by prescribers to the alterations in the strengths of the principal active ingredients in a number of the galenical preparations leading to an increase or decrease of their dosage. Regret must be expressed that the valuable suggestion put forward by Dr. Ralph Leftwich, and supported by Sir Lauder Brunton and others, that all galenical preparations of the same name should have the same dosage has not been adopted. The decoctions, mixtures, syrups, and aquæ (with one exception) conformed to that principle. The suggestion was made that the term tincture should apply to those of medium strength, while strong tinctures should have the prefix per-, and weak ones that of sub- applied to them. We note that vaccines are not included in the pharmacopœia owing to the fact that vaccine therapy is still in an experimental state, and that autogenous vaccines appear to be more efficacious than stock vaccines. Surprise must, however, be expressed at the non-inclusion of antidiphtheritic and antitetanic serums, novocaine, stovaine, salvarsan, and some of the organic silver compounds.

In conclusion, the British Pharmacopœia of 1914 may be considered a safe and sound guide, and an indication of what the recognized professional authority and the majority of practitioners deem worthy of official recognition.

British Medical Association News.

SCIENTIFIC.

A meeting of the Western Australian Branch was held at the Perth Public Hospital on September 16, 1914, Dr. Lotz, the President, in the chair.

Dr. J. Kynaston Couch read a paper on "Surgery as a Craft," which is printed on page 581 of the present issue.

In the discussion—

The President (Dr. Lotz) thanked Dr. Couch for his very interesting paper. He expressed the opinion that he had been rather severe upon the slow surgeon. At the present time thoroughness was of more importance than speed. He had seen a great many operations lately in Europe and America, and had come to the conclusion that the time-limit men were never so thorough nor reliable as the slower but thorough men. He thought the most successful operators were the deliberate and thorough men. Abnormal dexterity was rather natural than acquired. But it was his experience that the very deft man was often wanting in judgement.

Dr. Trethowan said that Dr. Couch's paper brought home a great defect in present-day surgical training, i.e., opportunity for practice of manipulation. Many senior surgeons were too selfish, and did not give the young men a chance to do work under their supervision, which would be of extreme value to them. The senior men could do good work here by pointing out, after the operation, where the juniors might have improved their technique. No doubt, as Dr. Lotz said, some men would never become dexterous, and this was often apparent even in the case of famous surgeons. But they were nevertheless successful, because they were thorough. But to a considerable extent he thought deftness could be cultivated. Many men continued to tie grany knots all their lives simply because they would not give the time or thought to master the reef knot. The brilliant, time-limit surgeon attempted to impress his audience, and often sacrificed thoroughness to speed. So that there was reason in the saying, "Save me from the brilliant surgeon." He attempts to work by the clock, but before he had finished one was very anxious and dubious concerning the result or success of the operaton. The speaker was, therefore of the opinion that abnormal dexterity did not tend to thoroughness. Operative surgery might be called high-class carpentry, but as in this craft the planning of the operation was often the main thing. In his reply, Dr. Couch thanked the members for the way in which they had received his paper.

MEDICO-POLITICAL.

A meeting of the New South Wales Branch was held at the B.M.A. Building, 30-34 Elizabeth Street, Sydney, on December 11, 1914, Dr. David Thomas (the President) in the chair.

Dr. R. H. Todd (the Hon. Secretary) moved, on behalf of the Council:—

> "That, in accordance with Article 25—whereby it is provided that (in addition to the powers conferred on the Council by the Articles of Association), the Council shall have such powers and duties as may be determined from time to time by the Association in General Meeting—the Council shall have power to appoint Committees with such duties and powers as may,.to it, seem necessary or convenient, and fix the quorum thereof, and lay down rules for regulating the proceedings of such Committees."

In explanation of this motion, Dr. Todd read a note which had been printed on the agenda paper to the following effect:—

> "In inviting the members to approve of this proposal for enabling the Council to institute standing committees (e.g., Executive and Finance, Organization and Science, Medical Politics, Ethical, etc.), in accordance with the system adopted in connexion with the Council of the British Medical Association at headquarters, the Council wishes the members to recognize the fact that the business of the Branch has increased greatly in recent years, and that it hopes that, by distributing the work among committees of its members, each commitee constituted so as to undertake the particular branch of work appropriate to it, and having the duty of reporting to the full Council at the regular periodic meetings thereof (which should be less frequent than at present), the work would fall less heavily on the individual members of the Council, while the efficiency of the Council as the managing body of the Branch would be increased."

Dr. Todd pointed out that the Council consisted of about 20 members, the majority of whom attended a large proportion of the meetings. In this way, many of the less important matters received the attention of the full Council, and this meant that each member had to devote a considerable amount of time to the work. Even in matters of considerable importance, greater expedition would be attained if the number of capable men dealing with them was small. In the past, the Council had appointed sub-committees—the Ethical, the Organization, the Contract Practice, and the Premises Sub-Committees—but these bodies had no power to act, and could therefore not relieve the Council of its duty of occupying itself with the consideration of every matter referred to them. There was no need to alter the Articles of Association, inasmuch as the Council had powers to delegate some or all of its duties to committees or other bodies, subject to the approval of a general meeting of the Branch. He considered that the present time was essentially appropriate for the change, inasmuch as, with the increasing activity of the Branch, the work could be apportioned to various committees at the beginning of the coming year.

Dr. Spiller Brandon seconded the motion without comment. No discussion took place, and, on the motion being put to the meeting, it was carried unanimously.

Dr. R. H. Todd (the Hon. Secretary) moved, on behalf of the Council:—

> "That, from and after January 1, 1915, the annual subscription of members of the Branch shall be £4 4s., provided that members of less than three years' standing as registered medical practitioners, members who shall have retired from medical practice, and members who are over 70 years of age, shall pay £3 3s. instead of £4 4s.; and provided that members of not less than three years' standing as registered medical practitioners who are permanent whole-time members of the public services of the Commonwealth (including the Naval and Military services), or of the State (including the New South Wales Government Railways and the University of Sydney), shall pay £3 3s., instead of £4 4s."

Dr. Todd stated that the general aim in the foregoing motion was to retain the principle on which the present by-law was based, while effecting an increase in the

amount. At present, the younger members had the benefit of a reduced subscription. If the proposed regulation were adopted, this benefit would be extended in a logical direction, and those who were not directly affected by the medico-political work of the Branch, more especially in its relation to contract and country practice, would not be asked to participate in an increased rate.

In the next place, he explained at considerable length the reasons which had influenced the Council in recommending the alteration. During the past few years, the work of the Council had increased very considerably, and in proportion to this increase of work there was an increase in responsibility. Special machinery had to be created for the performance of the work entrusted to it. The duties of the central office had grown beyond recognition, and, consequently, the cost had become much more. During the past two years, the relations of the profession to the Friendly Societies had required careful organization and constant attention to details. The three-guinea subscription had not covered the expenditure. He recognized that this expenditure in the immediate past had been exceptionally heavy, and would not have to be met in the same form in the future, but the Branch Council would have to be prepared to perform the work adequately and efficiently, in order to render the advantages gained permanent. The deficits in the past had been covered by levies. He considered that this was a bad principle. Furthermore, it was essential that provision should be made for a further extension of the work. At present, he had a small staff, which was being worked very hard.

He pointed out that this was not the first time that this proposal had been made. The Branch had considered it several times in the past. In 1913, all the 17 local associations had discussed it, and had instructed their delegates to favour the increase. A unanimous vote was passed at the meeting of the delegates. The matter was then referred to the Organization Sub-Committee, and the Council considered at a later date two proposals from this sub-committee, namely, that the subscription should be increased to either four or five guineas. In this year, the question had again been considered by every one of the local associations, and discussed very thoroughly. Many of the Associations still favoured a five-guinea subscription, but at the meeting of delegates, it was resolved that the smaller increase should be adopted. Dr. Todd admitted that the tendency of their excellent treasurers was to exercise a resisting influence both in regard to expenditure and to the calls which should be made on members. He spoke in appreciative terms of Dr. Crago's work as treasurer for a period of well over twenty years, and of Dr. George Armstrong's, who had looked after the purse of the Branch most conscientiously during Dr. Crago's absence from Australia. In spite of this restraining influence, the Council had considered a further report from the Organization Sub-Committee, and had decided to recommend an increase to four guineas.

The increase was certainly justified, when they considered the tremendous success of the Common Form of Agreement. The action of the Branch had no doubt resulted in a few cases in a temporary loss to some Lodge doctors. But it had led to a great benefit to others, and to the Friendly Society Lodges. They must also remember that the regulation of Friendly Society practice by this Branch had been of the greatest advantage to all the other Australian Branches, and had smoothed the way for a similar benefit accruing in the other States.

The speaker proceeded to account for the estimated expenditure of four guineas per member. In the first place, one guinea was required for the "British Medical Journal," and for the new "Journal" a further subscription of 20s. was required at present. For many years the Branch had been excellently served by the "Australasian Medical Gazette" as a monthly journal, for which the members paid the sum of 13s. 6d. for 12 issues. Dr. Rennie and Dr. Crago had in the most courageous manner possible converted the "Gazette" into a weekly journal a few years ago, without asking for an increased subscription. They had worked at great personal sacrifices, and the venture had turned out a complete success, but the members must remember that it had been decided that the Association should have one journal for the whole of the Commonwealth, and they looked for a journal which would take its place among the great medical journals of the world. He was satisfied that this future was in store for the new "Journal." He quoted from a letter written to the Directors of the Australasian Medical Publishing Company by the Editor of the "Journal of the American Medical Association," in which the writer had recounted the difficulties with which he had had to contend when starting that splendid journal. He had been attacked on the score of producing a parochial journal, but in spite of the taunts of being local the "Journal of the American Medical Association" had developed into its present high position of excellence. All this required money, and while the advertisement pages of a journal must in the long run be the chief source of revenue, in the early days a fair rate of subscription was required to render possible the development of the various departments necessary for a successful journal.

The members who paid two guineas would therefore be subscribing 41s. to the "British Medical Journal" and the "Medical Journal of Australia," and only 1s. to the Branch. The burden of paying for the cost of printing, postages, and other incidental expenses of membership for these members would therefore have to be borne by members who were paying more.

In addition to the ordinary Branch work, which cost a great deal, especially for printing and postage, the work in connexion with the expansion of the organizing work could not be undertaken without the incurring of expenditure. Persons who belonged to the various industrial callings would laugh at the idea of paying a contribution to their protecting society of so small a proportionate amount as four or five guineas. He touched lightly on the cost of keeping in touch with the local associations; this had been undertaken by an organizer in the past, but in future would be carried out by himself and the members of the Council. He was devoting practically all his time to the Association, and this had been recognized as a reason for the payment of a certain annual sum of money. There were other sources of expenditure in the Branch work, and he felt that if this increase of subscription were not determined on, it would be necessary for the Council to undertake less work in the future. He admitted that an increase of subscription always meant a small loss of membership, but he hoped that this loss would not be great, and, further, that as men recognized that more and more was being done for them, any loss which might be sustained as an immediate result of this step would be covered within a short time by an increase in the number of men joining the Association.

Dr. Litchfield seconded the motion, remarking that Dr. Todd had covered the ground so thoroughly that there was no need for him to add any further arguments.

Dr. E. B. Fitzpatrick begged leave to move an amendment to the effect "That the subscription be four guineas for all members." He argued that the younger members who were just qualified were able to pay the full subscription, since they had been freed from the expenses of student life, and, further, within a short time they would enjoy all the benefits derived from the good organization of the Branch. In regard to the older men, he was of opinion that when a practitioner reached the age of 70 years he should have made his position quite secure, and should not be in need of a remission. The public service men had the advantages over the general practitioners in having low expenses, a secure income, and protection by the Association against what he termed "grinding." He was convinced that the Lodge difficulties had not been overcome, and that a continued campaign would be necessary before the position of the medical officers would be quite secure. They would want funds for conducting this campaign.

The amendment lapsed, owing to the fact that it was not seconded.

Dr. Hull rose to oppose the motion, on the ground that the extra money was required for a policy of oppression, tyranny and compulsion. He did not oppose the increase of the subscription from three to four guineas, because of the extra guinea; but he did oppose it because he could

not tolerate the dictatorial and offensive requirements of the Branch. He was hurt at the light manner in which the Hon. Secretary had spoken of the resignation of old members like himself, who intended to retire from the Association because of this objectionable policy. The policy was unlikely to lead to mutual confidence. He appealed to members to reflect before this step had led to disastrous results. He prophesied that it would lead to the disruption of the Association. He believed that they would not remain at 4 guineas; 5, 6 or even 10 would be asked for; indeed, he had already heard it suggested that the subscription should be ten guineas. Reiterating his objection to the policy of tyranny, he was asked by a member what policy was being referred to. He replied that the policy was illustrated in a note to Lodge doctors in regard to the necessity of sending in the Forms of Agreement for the ensuing year. He repeated that, it was with much regret that he would be compelled to retire from the Association.

Dr. Spiller Brandon regarded the fact that a comparatively small attendance had been gained as evidence of the acquiescence of the mass of members to the proposed change. Had there been any real opposition, the men would have come in large numbers to the meeting.

Dr. Abbott appealed to Dr. Hull to reconsider his decision. He sympathized with his attitude, but considered that if Dr. Hull would attend the meetings regularly and learn more of the actual state of things in Lodge practice, he would modify his opinion. Many things had been found to be necessary for the protection of Lodge doctors which the Council would rather not have consented to. There was nothing tyrannical in the action of the Council. The men asked for all these things. They felt the advantage of being able to say to the Friendly Societies that they had to do certain things. All the regulations in connexion with the Common Form of Agreement were the results of the members' own wishes; the Council had not imposed any oppressive conditions on them. He would be very sorry indeed if Dr. Hull were to resign, and assured him that his membership was regarded as valuable both to them and to him. He stated in conclusion that he endeavoured as far as it was possible to maintain the scientific work of the Branch, and for this purpose he always sought to reserve special meetings for the discussions of medico-political matters, in order that the reading of scientific papers would not be disturbed.

Dr. Binnie directed Dr. Hull's attention to the fact that everything was getting more expensive, and that it was absurd to expect that the work of the Association could be carried out at the same cost now as years ago. Men had to pay more for the important privileges attaching to their membership. The policy of the Council had been dictated by the desires of the members. There was no question of a tyrannical policy.

Dr. Lawes spoke strongly in favour of the motion. Every local association had discussed this question again and again, and they had always come to the conclusion that the subscription must be increased. He maintained that the Branch was never more united than it was at the present time, and that Dr. Hull's fears of a disruption were not well founded.

Dr. Thomas (the President) in a most measured and skilful speech, pointed out to Dr. Hull that he (like Dr. Hull) found the medico-political work in connexion with contract practice most distasteful to him, but he had been forced to recognize its necessity. Dr. Hull's high ethical principles enabled him to take up a stand, which the ordinary man might not be able to maintain. He referred to the very valuable work undertaken by the Medico-Political Committee in London at the time of the Insurance Act difficulty. In a smaller way, the Council had undertaken this form of work in connexion with Lodge practice, and had been successful in safeguarding the interests of the members. He appealed to Dr. Hull, as an old friend, to reconsider his announced decision.

Dr. Todd, in closing the discussion, assured Dr. Hull that he had not intended to convey the impression that he regarded the resignation of old members of the Branch as a matter of small moment. Nothing was farther from his thoughts. He, too, regarded medico-political work as distasteful, and, twelve years ago, he had attempted to form a society of the Friendly Society Medical Officers for the purpose of undertaking the work of protection against the system of bleeding practised by the Lodges. The idea did not find general favour, and the British Medical Association, much against his desires, had taken up this work. Since then he had become so intimately associated with the medico-political activity of the Branch that he had learned to recognize the necessity of co-ordinate action, and the support of the Council. He explained the memorandum objected to by Dr. Hull as the one means of carrying into effect what the Lodge medical officers themselves wanted.

The motion was then put to the meeting, and was carried nemine contradicente.

Dr. R. H. Todd (the Hon. Secretary) moved, on behalf of the Council:—

> "That a vote of the meeting be taken with a view of enabling the Council to determine whether it is the wish of the members that, in the event of the Australian Natives' Association of New South Wales agreeing to accept the Common Form of Agreement between medical officers and Friendly Society Lodges, and so altering its constitution as to prohibit all participation in current politics or political movements, and to exclude from its membership all persons other than 'benefit members,' the Australian Natives' Association of New South Wales shall be recognized as a Friendly Society to which members will give their services as medical officers."

On the motion of Dr. Crago, seconded by Dr. Binnie, it was resolved that the discussion be postponed to a special meeting to be held about the middle of January, 1915.

A meeting of the Council of the Victorian Branch was held at the Medical Society Hall, East Melbourne, on December 10, 1914, Dr. A. V. M. Anderson, the Vice-President, in the chair.

Dr. L. S. Latham was elected Honorary Assistant Secretary, and Dr. C. P. W. Dyring, Honorary Assistant Treasurer.

It was decided that the Branch entertain the Federal Committee on the occasion of its meeting on February 1, 1915.

The following were elected members of the various Sub-Committees:—

Organization: Drs. Boyd, Johnson, Dyring, Wilkinson, Webb, Scott, Ostermeyer, and Fetherston.

Press: The President, Drs. Latham, and Wilkinson.

Ethical: Drs. Webb, Johnson, Boyd and Anderson.

Legislative: The President, Drs. Wood, Jones and Stephens.

Scientific: Drs. Mitchell, Latham, Newton, Maclure, Stephens and Hiller.

House: The President, the Hon. Secretary, and the Hon. Treasurer.

It was resolved that delegates of the Council should meet the Committee of the Yarram Hospital for the purpose of discussing the objections expressed by the Council in regard to "mixed" hospitals.

A vote of thanks was accorded to the retiring members of the Council, Drs. Syme, Sutherland and Laurie, for their valuable services.

Letters were read from the Secretary of the Local Sub-Division dealing with the question of medical ethics. The Sub-Divisions approved the Principles drawn up by the Federal Committee in regard to advertisements in country newspapers. It was resolved that enquiries should be made of the different Australian Branches as to whether these Principles had been adopted, and also as to what determination had been arrived at in regard to newspaper advertisements.

The Council resolved to suggest to the State authorities that Drs. Mollison and Syme should be appointed Trustees of the Medical Society Hall in place of the late Dr. John Williams and of Dr. J. P. Ryan.

The following were elected members of the Branch:—Dr. R. F. O'Sullivan, 70 Collins Street, Melbourne; Dr. Hugh F. Wickens, Tallangatta.

The following gentlemen have been elected members of the New South Wales Branch:—

Dr. Thomas Butler, Killara.

Dr. James Inglis Robertson, Lismore.

The following gentlemen have been nominated for election to the New South Wales Branch:—

Dr. Amos Walter Bowman, Germanton.

Dr. Terence Aubrey Daly, Concord.

BRITISH MEDICAL ASSOCIATION (AUSTRALIA) MILITARY AMBULANCE FUND.

The following is a complete list of subscriptions to the Fund inaugurated by the Federal Committee of the British Medical Association, and includes the amounts received during the sixth week ending December 15, 1914. The total amount received by the Honorary Secretary, Dr. G. H. Abbott (B.M.A. Building, 30-34 Elizabeth Street, Sydney), is £958 6s. 6d.

		£	s.	d.
Dr.	Aird, Ivie, Cumnock, N.S.W.	1	1	6
„	Aitken, M. Blair, Jamestown, S.A.	3	3	0
„	Alcorn, S. A., East Maitland	1	1	6
„	Alexander, L., South Yarra	0	10	6
„	Allen, Alex., Katoomba	2	2	0
„	Alport, G., Dover, Tas.	1	1	0
„	Alsop, Herbert, Bowral	1	1	0
„	Ambrose, T., Perth, W.A.	2	2	0
„	Anderson, Arthur, Goondiwindi, Q.	1	1	0
„	Anderson, A. V., Melbourne	1	1	0
„	Anderson, B. A., Westbury, Tas.	10	0	0
„	Anderson, S. M., Franklin, Tas.	1	1	0
„	Anderson, T. L., Fremantle, W.A.	1	0	0
	Anonymous	2	2	6
	Anonymous	10	0	0
Dr.	Arkle, J. Vere, Kalgoorlie, W.A.	1	2	0
„	Armstrong, George, Sydney	1	1	0
„	Asher, M., Sydney	1	1	0
„	Aspinall, Jessie, Sydney	1	1	0
„	Barrington, F., Sydney	2	2	0
„	Bassett, W. P., Bathurst	1	1	0
„	Baur, F. S., Newcastle	1	1	6
„	Beaman, E. H., Bundaberg, Q.	2	2	0
„	Beatty, H. R., Braidwood	1	1	6
„	Beet, W. A., Beaudesert, Q.	2	2	0
„	Begg, Wm., Camden Haven	1	1	6
„	Beith, R., Kiama	5	5	0
„	Bell, Geo., Sydney	5	0	0
„	Benham, Rosamond, Queensland	1	1	0
„	Bennet, F. A., Sydney	1	1	0
„	Bennett, H. V., Prahran, Vic.	1	1	0
„	Bennett, J. H., Clovelly, Vic.	1	1	0
„	Bertram, Hussey, Q.	1	1	0
„	Best, Alban, Heyfield, Vic.	0	10	6
„	Birks, M., Broken Hill	1	0	0
„	Blackall, P., Queanbeyan	0	10	6
„	Blackburn, C. B., Sydney	25	0	0
„	Blackwood, F. M., Turramurra	2	2	0
„	Blakie, J. G., Melbourne	0	7	6
„	Blaxland, M. B., Fremantle	1	1	0
„	Blue, A. J., Redfern, N.S.W.	1	1	0
„	Bonnin, F. J., Ararat, Vic.	3	3	0
„	Bonnin, J. A., Hindmarsh, S.A.	1	2	0
„	Booth, J., Broken Hill	0	10	6
„	Borthwick, F. H., Kensington, S.A.	2	2	0
„	Borthwick, T., Adelaide	1	1	0
„	Boake, James J., Richmond, N.Q.	2	2	0
„	Bourke, W., Hawthorn, Vic.	1	1	0
„	Bourne, Eleanor, Brisbane	1	1	6
„	Boyd, W. R., Richmond, V.	5	5	0
„	Bracken, A. E., Waverley	1	1	0
„	Brandon, A. J. S., Sydney	1	1	0
„	Bray, P. D., Blayney	3	3	6
„	Brockway, A. B., Brisbane	5	5	0
„	Brooks, E., Hobart	1	1	0
„	Brooks, G., Petersham	2	2	0
„	Brown, R. E., St. Kilda, Vic.	1	1	0
„	Brown, W. S., Parramatta	1	1	0
„	Browne, Harold, Summer Hill	1	1	0
„	Brady, A. J., Sydney	2	2	0
„	Brummitt, Elliott A., Adelaide	2	2	6
„	Brummitt, R. D., St. Peter's, S.A.	1	1	0
Dr.	Bull, R. J., University, Victoria	1	2	0
„	Bunard, R. G., Narracoorte	0	10	6
„	Burfitt, Mary, Glebe	1	1	0
„	Burkitt, E. H., Dubbo	2	2	0
„	Busby, H., Bathurst	1	1	0
„	Butcher, C. B. D., Pittsworth, Q.	1	1	0
„	Button, H. G., Junee	1	1	0
„	Cahill, A. J., Lismore	1	1	0
„	Cameron, J. A., Ipswich, Q.	5	0	0
„	Chambers, R. W. V.	1	0	0
„	Campbell, T. G., Haberfield	0	10	6
„	Campbell, T. S., Aramac, Vic.	2	0	0
„	Carvosso, A. B., Brisbane	2	3	0
„	Chenhall, W. T., Sydney	2	2	0
„	Cherry, P. T. S., Tailem End, S.A.	1	1	0
„	Clarke, C., Petersburg, S.A.	1	1	6
„	Clarke, P. G., Portarlington, Vic.	1	2	0
„	Clatworthy, C. H., Gladstone, Q.	1	1	0
„	Clay, W. R., Narrabeen	1	1	0
„	Clayton, A. R., Moonta, S.A.	3	3	0
„	Cleland, J. B., Neutral Bay	1	1	0
„	Clubbe, C. P., Sydney	1	1	0
„	Cohen, A. A., Sydney	1	1	0
„	Cole, G. S., Geelong	1	1	6
„	Collier, F. D., Wallsend	1	1	0
„	Collins, V. E., Port Douglas, Q.	1	2	0
„	Connell, M., Hawker, S.A.	1	0	0
„	Connolly, T P., Toowoomba, Q.	1	1	0
„	Cooper, C. T., Norwood, S.A.	2	2	0
„	Cooper, Lilian, Brisbane	1	1	0
„	Corlette, C. E., Sydney	1	1	0
„	Cosh, J. I. C., Ashfield, N.S.W.	1	1	0
„	Cox, F. S., South Yarra	1	1	0
„	Craig, F. B., Newtown	1	1	0
„	Craig, W. J., Boxhill, V.	1	2	0
„	Crawford, J. H., Miles, Q.	1	1	6
„	Cribb, A. Gordon, Millthorpe	1	11	6
„	Croker, J., Geelong	2	0	0
„	Crook, A. A., North Melbourne	2	2	0
„	Crossle, F. C., Wilcannia	2	2	6
„	Culpin, E., South Brisbane	1	1	0
„	Curtin, A., Grenfell	1	1	6
„	Culpin, M., Taringa, Q.	1	0	0
„	D'Arcy, Constance, Sydney	1	1	0
„	Dane, P. G., Ballarat	2	1	0
„	Davies, L., Nagambie, Vic.	1	0	0
„	Davis, M. C., Violet Town, Vic.	1	1	0
„	Davis, G. J., Beaconsfield	1	1	6
„	Davis, N. J., Bullahdellah	1	1	0
„	Dawson, D. D., Port Pirie	2	2	0
„	Dennis, C. E., Melbourne	1	1	0
„	Devine, H. W., Melbourne	2	2	0
„	Dey, Lindsay, Sydney	1	1	0
„	Dick, J. A., Randwick	2	2	0
„	Dight, W. B., Roseville, Sydney	2	2	0
„	Dolman, E., Gatton, Q.	1	1	0
„	D'Ombrain, A. E., Sydney	1	1	0
„	Douglas, F. J., Victor Harbour, S.A.	1	2	0
„	Douglas, J. C., Adamstown	1	1	6
„	Douglas, T. S., Tamworth	1	1	0
„	Downing, H. D., Footscray, V.	1	2	0
„	Dowling, Norman, Young	1	1	0
„	Drummond and Burston, S.A.	2	2	0
„	Duguid, C., Adelaide	1	1	0
„	Duncan, R. V., Victoria	1	1	0
„	Dunlop, Norman J., Newcastle	1	1	0
„	Eddie, R., Bombala	1	1	0
„	Edmeades, T. R., Gingin, Q.	1	1	0
„	Edwards, George, Woomalong, Vic.	1	1	0
„	Elwell, Bellford, Stanthorpe, Q.	2	2	0
„	Elworthy, W., Esk, Q.	1	0	0
„	Embley, E. M., Melbourne	1	1	0
„	English, J., Yass	0	10	6
„	Evans, T. G. C., Kyogle	1	1	0
„	Ewing, T., Nowra	5	0	0
„	Faithfull, R. L., Sydney	5	0	0
„	Failes, T. G., Coonabarabran	1	1	0
„	Farmer, E., Toowoomba, Q.	2	3	0
„	Featherstonhaugh, C., Williamstown, Vic.	1	0	0
„	Feige, A., Wayville, S.A.	1	0	0
„	Ferguson, E. W., Sydney	1	1	0

	£	s.	d.
Dr. Fetherston, R. H., Melbourne	10	10	0
„ Finckh, A. E., Sydney	0	10	6
„ Forster, A. E. Blackett, Clunes, Vic.	1	1	0
„ Fox, H. E., Kiama	1	1	0
„ Garde, H., Maryborough	1	1	0
„ Gault, A. H., Lower Mitcham, S.A.	1	1	0
„ George, Issac, Mornington, W.A.	1	0	0
„ Gethring, E. J., Port Adelaide	1	1	0
„ Gibbs, R. H., Colac, Vic.	1	2	0
„ Gibson, A. J., Sydney	1	1	0
„ Gibson, J. Lockhart, Brisbane	5	6	0
„ Gilbert, H. Y., Adelaide	2	3	0
„ Gillies, Sinclair, Sydney	5	5	0
„ Gledden, A. Maitland, Sydney	1	1	0
„ Gollan, L., Ulverstone, Tas.	1	1	0
„ Goode, A., Terowi, S.A.	1	1	3
„ Good, M. E., Port Pirie	2	2	0
„ Green, Raymond A. R., Burrenjuck	0	10	6
„ Greenham, E. C., Brisbane	2	2	0
„ Greig, Janet L., Melbourne	1	1	0
„ Greig, Jane, Melbourne	1	1	6
„ Griffiths, E. W., Mile End, S.A.	1	1	0
„ Griffiths, F. Guy, Sydney	5	0	0
„ Gullett, Lucy, Sydney	1	1	0
„ Gunson, J. B., Adelaide	1	1	0
„ Halford, A. C. F., Clayfield, Q.	1	1	0
„ Halliday, J., Sydney	2	2	0
„ Hamilton, C. W., Adelaide	1	2	0
„ Hamilton, H. A., Queenstown, Tas.	1	1	0
„ Hamilton, J. A. G., Adelaide	2	2	0
„ Hamilton, T. H., Adelaide	1	1	6
„ Harbison, D. T., Bowral, N.S.W.	1	1	0
„ Harbison, W. H., Wallaroo, S.A.	1	1	0
„ Hardie, David, Brisbane	2	2	0
„ Harding, R. V., Rockhampton, Q.	2	2	0
„ Harker, A. J., Lambton	2	2	6
„ Harkness, E., Lang Lang, Vic.	1	0	0
„ Harlin, F. M. and R., Killarney, Q.	2	3	0
„ Harper, Margt., Sydney	1	1	0
„ Hart, Basil, Ipswich	1	1	0
„ Harvey, W. A., Hobart	1	1	0
„ Harris, John, Sydney	1	1	0
„ Harris, S. Harry, Enmore	5	5	0
„ Hawthorn, A., Carcoar	0	10	6
„ Hayes, H. A., Warragul, Vic.	1	1	0
„ Hayward, G. C., Adelaide	1	1	0
„ Hayward, Lionel, Loxton, S.A.	1	2	0
„ Henzell, A. P., Brisbane	2	0	0
„ Hetherington, H. B., Burwood	1	1	0
„ Hewlett, H., Fitzroy, Vic	0	10	6
„ Higgins, John, Clermont, Q.	1	1	0
„ Hipsley, Percy, Waverley	1	1	0
„ Hoare, J. W., Mackay, Q.	2	3	0
„ Hocken, J. P., West Wallsend	1	1	0
„ Hoets, J., Glebe	1	1	0
„ Hodkinson, R., Coonamble	1	1	0
„ Holder, J. R., Wallaroo, S.A.	1	1	0
„ Holland, J. J., Perth, W.A.	1	1	0
„ Holmes, H. G., Mosman	1	1	0
„ Hone, F. S., Semaphore, S.A.	5	5	0
„ Hood, Jarvie, Sydney	21	0	0
„ Hope, J. W., Perth, W.A.	1	0	0
„ Hornabrook, R. W., Malvern, Vic.	2	2	0
„ Howard, H., Melbourne	1	1	6
„ Huckell, E. V. R., Toorak, Vic.	1	1	0
„ Huggart, W. C., Helensburg	3	3	0
„ Hughes, James, Sydney	1	1	0
„ Hughes, Kent, Melbourne	5	1	0
„ Hughes, M. O. G., Sydney	1	1	0
„ Hughes, S. H., Sydney	1	1	0
„ Hull, Walter, Sydney	2	2	0
„ Humphrey, E., Townsville, Q.	5	6	0
„ Humphreys, S. E., Footscray, Vic.	0	10	6
„ Hunter, James, Gosford, N.S.W.	1	1	0
„ Hurrey, H. G., Rosewood, Q.	1	1	0
„ Hutchinson, E. L., Wee Waa, N.S.W.	1	1	0
„ Hutchinson, F., Daylesford, Vic.	1	1	0
„ Ingham, J. H. J., Dimboola	1	1	0
„ Irving, H., Glen Thompson, Vic.	2	2	0
„ Irwin, H. O., Boulder, W.A.	1	1	0
„ James, Thos., Moonta, S.A.	1	1	0

	£	s.	d.
Dr. James, W. A., Wallaroo, S.A.	1	1	0
„ Jamieson, Stanley, Yarrawonga, Vic.	1	1	0
„ Jamieson, Sydney, Sydney	1	1	0
„ Jay, H. M., Adelaide	1	1	0
„ Jay, M., Adelaide	1	1	0
„ Jenkins, Edward J., Sydney	3	3	0
„ Johnston, A. G., Riverstone, N.S.W.	1	1	0
„ Johnson, J. M., Melbourne	10	1	0
„ Jones, Sir Philip, Strathfield	5	5	0
„ Jones, S. Evan, Parramatta	1	0	0
„ Joske, A. S., Prahran, Vic.	1	1	0
„ Kaye, W. H., Sydney	1	1	0
„ Kenny, A. L., Melbourne	2	3	0
„ Kerr, A. L., Sydney	2	2	0
„ King, C. E., Kalgoorlie, W.A.	2	2	0
„ Kirkwood, W. L., Wollongong	1	1	0
„ Latham, Oliver, Sydney	1	1	0
„ Lawes, C. H. E., Petersham	1	1	0
„ Lawrence, Herman, Melbourne	2	2	0
„ Lawton, F. B., Melbourne	1	1	0
„ Lee, H. E., Burwood	1	1	0
„ Lee, H. H., Wollongong	2	2	6
„ Lendon, A. A., Adelaide	1	1	6
„ Lethbridge, H. O., Narandera	2	2	0
„ Levis, Eric H., South Australia	1	1	0
„ Lewis, J. B., Narrogin, W.A.	1	2	0
„ Liddle, Percy, Daylesford, Vic.	0	10	0
„ Lightoller, G. H., Edgecliff	10	0	0
„ Llewellyn, Rees, Haberfield	1	1	0
„ Lloyd, C. H., Warwick, Q.	1	1	6
„ Lucas, R. R., Laura, S.A.	1	0	0
„ Luker, Donald, Sydney	1	1	0
„ Lidwill, M., Strathfield	1	0	0
„ Lipscombe, T. W., Leichhardt	2	2	0
„ Litchfield, W. F., Glebe	2	2	0
„ Loughrey, B., Hawthorn, Vic.	1	2	0
„ Love, J., Tasmania	1	1	0
„ Machattie, T., Bathurst	1	1	0
„ MacCullock, H. C., Lewisham	1	1	0
„ MacDonald, A. J., Laidley, Q.	1	1	0
„ Macintosh, A. H., Leura	2	2	0
„ MacKenzie, J. and J. A., Glen Innes	2	2	6
„ Mackay, E. A., Toorak, Vic.	5	0	0
„ Mackay, N. G., Adavale, Q.	1	1	0
„ Mackie, D. W., Narrogin, W.A.	2	3	0
„ Maclean, Donald, Brighton, Vic.	1	0	0
„ Maclean, James, Chatswood	2	2	0
„ Maclure, F., Melbourne	2	2	6
„ MacMaster, John, North Sydney	1	1	0
„ Macquarie, Charles, Murray Bridge	1	2	0
„ Maffey, R. W., Singleton	1	1	0
„ Magarey, C., Norwood, S.A.	10	0	0
„ Magarey, R. E., Atherton, Q.	5	0	6
„ Maher, Odillo, Sydney	3	3	0
„ Maher, C. H., Sydney	1	1	0
„ Maitland, H. Q., Sydney	3	3	0
„ Marsh, H. T., Bombala	2	2	0
„ Marshall, H. H., Sydney	2	2	0
„ Martin, R. H., Adelaide	3	3	0
„ Maw, H. S., Tumbarumba	1	1	6
„ Mawson, W., Campbelltown	1	1	0
„ May, H. T. H., Bundaberg, Q.	5	5	0
„ Mayo, Helen, Adelaide	1	0	0
„ Mead, Gertrude, Perth	0	10	0
„ Merryweather, R. C., Perth, W.A.	1	1	0
„ Michell, R. T., Molong	1	1	0
„ Michod, T. H., Longreach, Q.	1	1	0
„ Miller, F., Maryborough, Q.	1	1	0
„ Miller, R. C., Bankstown, N.S.W.	2	2	0
„ Millett, W. L., North Queensland	1	1	0
„ Mills, A. E., Sydney	3	3	0
„ Mollison, C. H., Melbourne	1	1	6
„ Moray, J. M., Winton, Q.	2	0	0
„ Morgan, A. M., Adelaide	1	1	0
„ Morgan, G. H., Hamilton, Tas.	1	1	0
„ Morlet, J., Brisbane	1	1	0
„ Morrison, R. H., Melbourne	2	2	0
„ Morris, Arthur, Melbourne	1	10	0
„ Morris, E. W., South Australia	1	1	0
„ Morton, A. E., Worsley, W.A.	1	1	0
„ Morton, J., Sydney	3	3	0
„ Moule, E. E., Wagin, W.A.	2	3	0

	£	s.	d.
Dr. Muirhead, L. G., Woodville, S.A.	0	11	6
„ Murray, J. A. J., Armidale	1	1	0
„ Muscio, A., Emmaville, N.S.W.	2	2	0
„ McAdam, R., St. Kilda, Vic.	1	2	0
„ McArthur, G. A., Melbourne	1	0	0
„ McCall, J., Leonora, W.A.	2	3	6
„ McCallum, G., Geelong, Vic.	1	1	0
„ McClelland, R. E., Newtown	2	2	0
„ McClelland, W. C., Newtown	1	1	0
„ McCredie, R. W., Campsie	5	5	0
„ McDonnell, A. J., Toowoomba, Q.	3	3	0
„ McDouall, J. A., Gladesville	1	1	0
„ McDowall, St. A., Oakey, Q.	1	0	0
„ McDowall, V., Laidley, Q.	1	1	0
„ Mollison, C. H., Melbourne	1	1	6
„ McIntosh, Alex., Clayfield, Q.	1	1	0
„ McKeddie, R. S., St. George, Q.	1	1	6
„ M'Killop, L., Blackall, Q.	1	1	6
„ McLeod, James, Rockdale	1	1	0
„ McMurray, W., Sydney	1	1	0
„ MacPherson, J., Sydney	1	1	0
„ Naylor, A. G. E., Loch, Vic.	1	0	0
„ Nesbitt, D., Swan Reach, S.A.	2	0	0
„ Newland, H. S., Adelaide	1	1	0
„ Newman, F. J., Geelong, V.	1	1	0
„ Newton, A., Melbourne	2	3	0
„ Nickson, Wilfred, Newcastle	1	1	6
„ Nihill, J. E., Melbourne	3	4	0
„ Norrie, Andrew, Sydney	1	1	0
„ Norton, T. W. W., Melbourne	1	1	0
„ Nyulasy, F. A., Toorak, Vic.	1	2	0
„ O'Hara, A. A., Darlinghurst	3	3	0
„ O'Neill, W. H., Turramurra	2	2	0
„ Opie, A. J., Coraki	0	10	0
„ O'Reilly, Susie, Pymble	1	1	0
„ Orford, R. J., Stroud	1	1	6
„ Ott, Augustus, Ayr, Q.	1	1	6
„ Owen, G., Camperdown, V.	1	1	0
„ Page, E., S. Grafton, N.S.W.	1	1	0
„ Palmer, A. A., Sydney	1	1	0
„ Palmer, H. W., Waterfall	1	0	0
„ Park, Joseph, Corrimal	2	2	0
„ Parker, G. M., Swansea, Tas.	0	10	6
„ Parker, R. A., Henlesville, Q.	1	1	0
„ Parry, A. E., Rockhampton	2	0	0
„ Parry, H. D., Picton	1	1	6
„ Paton, D. M., Melbourne	1	1	0
„ Paton, J. T., Blackheath	1	1	6
„ Patrick, J. F., Scottsdale, Tas.	1	0	0
„ Patterson, M., Ipswich, Q.	1	0	0
„ Patton, J. S., Lismore, Vic.	1	1	0
„ Paul, G. W., Brisbane	1	1	0
„ Payne, W. S., Brisbane	1	1	0
„ Perkins, M., Morpeth	1	1	0
„ Pern, H., South Gippsland	2	2	0
„ Phipps, M. W., Barraba, N.S.W.	1	1	0
„ Pockley, E., Summer Hill	2	2	0
„ Pockley, F. A., Sydney	2	2	0
„ Pollock, John, Queenscliff, Vic.	1	2	0
„ Pope, E. C., Western Australia	0	10	6
„ Potter, W. A., Port Melbourne	1	1	0
„ Poulton, D., Adelaide	1	1	6
„ Powell, A. H., Colac, Vic.	2	2	0
„ Price, Thos. A., Toowoomba, Q.	1	1	0
„ Pym, C. B., Parramatta	2	0	0
„ Quilter, J., Moruya	3	3	0
„ Quirk, D. T., St. Kilda, Vic.	2	2	0
„ Raffan, G., Sydney	1	0	0
„ Ramsay, J., Launceston	2	2	6
„ Read, Clarence, Chatswood	5	5	0
„ Read, S. D., Horsham, Vic.	1	0	0
„ Reid, J. McP., Richmond, Vic.	1	1	6
„ Rennie, G. E., Sydney	2	2	0
„ Ridley, S. J., Oakleigh, V.	2	2	0
„ Robertson, D. J. R., Childers, Q.	1	0	0
„ Robertson, F. G., Collarenebri	1	1	0
„ Robertson, W., Adelaide	1	1	6
„ Robertson, W. N., Brisbane	2	2	6
„ Rodgers, D., Brisbane	2	2	0
„ Russell, E., Stanthorpe, Q.	1	1	0

	£	s.	d.
Dr. Sangster, J. T., Glenelg, S.A.	0	10	6
„ Sawrey, E. R., Melbourne	10	11	0
„ Schlink, H. H., Sydney	1	1	0
„ Scott, C. H., Scone	0	10	0
„ Scott, J. A., Hawthorn, Vic.	2	2	0
„ Scott, J. D. K., East Malvern, Vic.	1	1	0
„ Scott, K., Brisbane	5	5	6
„ Scott, Malcolm, Mount Barker, S.A.	10	0	0
„ Sewell, S. W., Melbourne	5	5	0
„ Sexton, Helen, Melbourne	1	1	0
„ Shaw, Helen, Toowong, Q.	1	0	6
„ Shaw, F. C., Wyalong	2	2	0
„ Shaw, P., Kew, Vic.	10	0	0
„ Shepherd, Cyril, Sydney	1	1	0
„ Shorney, H., Adelaide	1	1	6
„ Shuter, R. E., Melbourne	1	2	0
„ Simmons, W. T., Summer Hill, N.S.W.	1	1	0
„ Sinclair, E. P., Newtown	1	1	0
„ Sinclair, Eric, Sydney	2	2	0
„ Sinclair, T. W., Melbourne	1	0	0
„ Smellie, W., Penguin, Tas.	1	1	0
„ Smith, D. C., South Yarra	2	2	0
„ Smith, Eric, Port Macquarie	1	1	6
„ Smith, G. Walton, Paddington	1	1	0
„ Smith, O. W., Clare, S.A.	1	1	6
„ Smith, S. A., Sydney	3	3	0
„ Spark, E. J. S., Queensland	1	1	0
„ Sirois, E., Marburg, Q.	2	2	0
„ Spring, J. P., Carlton, Vic.	1	1	0
„ Sprod, Milo, Mannum, S.A.	1	1	0
„ Sprott, Gregory, Hobart	1	1	0
„ Sprowers, C. A., East Melbourne	1	1	0
„ Stanley, G. P., Tamworth	2	2	0
„ Stanley, H. B., Melbourne	1	1	0
„ Stawell, R. R., Melbourne	3	3	0
„ Stephen, E. M., Ashfield	2	2	0
„ Stewart, H. P., Brisbane	1	2	0
„ Stokes, A. F., Glenelg, S.A.	1	0	0
„ Stone, Clara, Melbourne	0	10	6
„ Stuart, Sir T. Anderson, Sydney	2	2	0
„ Stuckey, F. S., Inverell	1	1	0
„ Sutcliffe, W. E., Morwell, Vic.	1	1	6
„ Sutton, C. B., North Carlton, V.	1	1	0
„ Sutton, Harvey, Melbourne	1	1	0
„ Sweet, Elizabeth M., Brisbane	1	1	0
„ Sweetman, D. F., Launceston	1	1	0
„ Swift, H., Adelaide	1	1	0
„ Syme, G. A., Melbourne	1	1	0
„ Tate, M. E., West Tamar, Tas.	0	10	6
„ Teague, H., Victoria Park, W.A.	2	2	0
„ Thomas, F. C., Canterbury, Vic.	1	1	0
„ Thomas, H. D., Caulfield, Vic.	0	10	6
„ Throsby, H., North Sydney	1	1	0
„ Tidsdale, Frank, Sydney	1	1	0
„ Tipping, F., Oodnadatta, S.A.	1	1	0
„ Todd, R. H., Sydney	20	0	0
„ Tofft, W. H., Campbell Town, Tas.	0	10	0
„ Tomlins, W. H., Alstonville	1	1	6
„ Tomlinson, W. R., Sydney	1	1	0
„ Tratman, F., Sydney	1	1	0
„ Tregear, G. H., Victoria	1	1	0
„ Trethowan, W., Perth, W.A.	2	2	6
„ Tucker, E. C., Friezland, Q.	1	1	0
„ Turnbull, H. H., Melbourne	50	0	0
„ Turner, A. J., Brisbane	5	5	0
„ Ure, Edith, Brisbane	1	0	0
„ Vance, E. B. Leeton	1	0	0
„ Verco, J. C., Adelaide	10	11	0
„ Verco, S. M., South Australia	1	1	6
„ Vernon, G. H., Winton, Q.	5	1	0
„ Vickery, K. F., Sydney	1	1	0
„ Von Lukowitz, M., Adelaide	5	6	0
„ Wallace, Robert, Rosewood, Q.	1	1	6
„ Wallace, T. J., Longreach, Q.	1	1	0
„ Warren, H. Guy, Sydney	5	0	0
„ Watkins, S., Hornsby	1	1	0
„ Watson, A., Adelaide	1	0	0
„ Watson, F. R., Katoomba	1	1	6
„ Watson, J. W., West Wallsend	1	1	0
„ Watson, Roy, Melbourne	1	1	0

	£	s.	d.
Dr. Watt, George, Wellington, N.S.W.	3	3	0
„ Webster, P. S., Melbourne	5	1	0
„ Weigall, G., Elsternwick, Vic.	1	1	0
„ Welch, K. St. V., Narandera	1	1	0
„ Weld, J. C., Dromana, Vic.	0	11	0
„ Welsh, Prof., Sydney	1	12	0
„ West, F., Camden	1	1	0
„ West, G. R., Kaniva, Vic.	2	3	0
„ Whiteman, R. J., Strathfield	2	2	0
„ Wherrett, E. A., Marrickville	1	1	0
„ Wigg, H. H., Adelaide	1	1	0
„ Wilkinson, A. M., Glenferrie, Vic.	1	2	0
„ Williams, C. E., Mackay, Q.	2	2	0
„ Wilson, Prof., University, Sydney	5	5	0
„ Wilson, W. E., Charlton, Vic.	1	1	0
„ Windeyer, J. C., Sydney	3	3	0
„ Winterbotham, L. P., Annesley	2	0	0
„ Woinarski, V. J., Melbourne	1	0	0
„ Wood, A. Jeffreys, Melbourne	2	3	0
„ Wood, P. M., Ashfield	2	2	0
„ Woolf, S., Sydney	1	0	0
„ Wood, W. A., South Yarra	1	1	0
„ Wooster, F. C., Rockhampton	1	1	6
„ Worrall, Ralph, Sydney	2	2	0
„ Worrall, R., Sydney	1	1	0
"X.Y.Z.," Sydney	2	2	0
Dr. Yeatman, J. W., Auburn, S.A.	1	1	3
„ Young, R. W., Botany, N.S.W.	1	1	0
„ Yule, J. S., Melbourne	1	0	0

—o—

Public Health.

SMALL-POX IN SYDNEY.

The number of small-pox cases reported to the Department of Public Health, New South Wales, during the week ended December 13, 1914, were:—

	Cases.
City of Sydney and Metropolitan District	3

HEALTH OF NEW SOUTH WALES.

The following notifications have been received during the fortnight ending December 7, 1914, by the Department of Public Health, New South Wales:—

	Enteric Fever.		Scarlet Fever.		Diphtheria.	
	Cs.	D'ths.	Cs.	D'ths.	Cs.	D'ths.
Metrop. Combined Dist.	19	—	93	—	54	—
Hunter Riv. Comb. Dist.	11	—	12	—	4	—
Remainder of State	43	1	38	—	97	7
Totals	73	1	143	—	155	7

It is satisfactory to note that the incidence of enteric fever in Broken Hill and Goulburn is not high, the number of cases recorded being 12 and 4 respectively. On the other hand, there were 28 cases of diphtheria at Broken Hill, and 5 at Tarcutta. The greatest frequency of scarlet fever was met with at Hay, where there were 7 cases, and at Peak Hill, where there were 5.

INFECTIVE DISEASES IN QUEENSLAND.

The following notifications have been received by the Department of Public Health, Queensland, during the week ended December 5, 1914:—

Notifiable Diseases.	Cases.
Enteric Fever	38
Diphtheria	35
Varicella	8
Phthisis	5
Erysipelas	2
Scarlet Fever	1
Puerperal Fever	1
Infantile Paralysis	18
Cerebro-Spinal Meningitis	1
Total	109

THE HEALTH OF TASMANIA.

The annual report of the Chief Health Officer, Chief Inspector of Factories, and Chief Quarantine Officer for Tasmania for the year 1913-14 is a publication of intrinsic value, worthy of careful and prolonged study. Dr. McClintock indulges in the expression of opinions and views, some of which may not find general acceptance, but all of which merit the serious consideration of hygienists.

The introductory chapter includes a general survey of the health conditions of Tasmania, and of the steps taken during the year for the improvement of the same. The second chapter is headed "Public Health Act, 1903," and contains a considerable amount of important information. The Chief Health Officer admits that the local sanitary administration in several rural districts appears to be somewhat at variance with modern methods. In its administrative capacity the Department of Public Health necessarily comes into conflict with parochial prejudices in many ways. The Local Medical Officers of Health in small districts are in a very unenviable position. They receive a salary of from £10 to £20 per annum, and are subjected to persons whose knowledge of health matters is often most elementary. In regard to the actions taken by the Inspectors, a number of complaints were dealt with during the year, and the Local Authority was required to apply a rememdy. A very useful table has been compiled, showing the form of the sanitary service, that of the garbage service, the number of dairies registered, the number of offensive trades, the number and nature of samples analysed under the Food and Drugs Act, the number of registered ice-cream shops, the source of water supply, whether the same is reticulated or not, the system of sanitary inspection, etc., for each of the 51 local sanitary authorities. Some difficulty has been experienced in regard to the methods of dealing with objectionable odours caused by noxious trades in Hobart during the summer time. The choice of a "noxious trade area" in Launceston is still under discussion, and is receiving the attention of the authorities. In Devonport, one of the slaughter-houses in the centre of the town was found to be in a very insanitary and filthy condition. It was also discovered that tallow melting had been carried on in the town, contrary to the provisions of the Act.

Various other matters are dealt with, showing that the Department is fully alive to the necessity of taking energetic steps to safeguard the public health. A Bill will be submitted to Parliament at an early date to minimize the risks from fire and other calamities in public buildings.

In regard to the vital statistics, two points are emphasized, viz., the high percentage of deaths due to senility, and the high incidence of diphtheria. The population continues to increase, and is now estimated at 201,675. The increase in the past decade was 10.86%. The birth-rate for 1913 was 30.24 per 1,000 of population, as compared with 28.25 for the whole Commonwealth. The death-rate was 10.87, which was slightly higher than that of Western Australia, Queensland, and South Australia, and slightly lower than New South Wales and Victoria. In the Northern Territory it was considerably higher.

The total number of cases of infective diseases notified during the year was 1,857, which is 84 more than the previous year; 234 cases of varicella, however, were included, while this disease was not notifiable in previous years. There were 837 cases of diphtheria with 38 deaths. The death-rate of diphtheria per 10,000 of population was 1.93. There were 225 cases of scarlet fever reported, but no deaths. Eleven persons died of measles, 14 of enteric fever, 22 of pertussis, 21 of influenza, 145 of tubercular diseases, 140 of cancer, and 12 of syphilis; 123 took place in early infancy. The number of deaths from tuberculosis has gradually decreased from 172 in 1904 to 145 in 1913. In regard to cancer, the number of deaths of males and females were approximately equal since 1870. The average for the years 1870-71-72 was 51.33, which gives a death-rate per 10,000 of population of 5.06. In 1915 the number was 140, and the rate 7.14.

The third chapter is headed "Food and Drugs Act, 1910." This Act came into force on May 1, 1911, while the various regulations were introduced during the years 1911-12. All aerated water and ice-cream manufacturers are required to take out an annual license; tinned foods are subject to careful inspection; and milk and other articles are con-

trolled by analysis. In all 158 analyses were conducted during the year. In a certain number of instances a deficiency in proof-spirit was discovered in regard to rum, brandy and whisky. Three samples of milk were found to be deficient in fat, and one in solids other than fat. Of the drugs analysed one mixture vaunted under the title of a "gold cure" was found to contain strychnine and a mere trace of gold.

An elaborate chapter dealing with the hygiene of factories contains a mass of information. Notices to remedy defects in sanitation, cleanliness, provision for safe-guarding employees, etc., were served in a certain number of cases, and the necessity of taking legal proceedings was thus overcome in a majority of instances. Entire absence of sanitary accommodation was reported on a few occasions. A number of tables are given setting forth the conditions obtaining in regard to the various trades.

The two following chapters dealing with the activity of the Wages Board and the administration of the Shops Closing Acts do not call for any special comment.

The final chapter deals with the administration of the Midwives Act of 1911. In the month of February a list of midwives who have taken out certificates is published in the "Government Gazette." The appearance of the name of any woman in this list is accepted as prima facie evidence that she is a certified midwife, and the absence of such name that she is not a certified midwife. Up to June, 1914, 276 midwives were registered. On December 31, 1914, all claims for registration from the Midwifery Nurses Act, 1901, expires, and midwives who have ceased to hold annual certificates will not be entitled to be registered, unless evidence is produced which is satisfactory to the Medical Council in regard to the circumstances under which they have ceased to take out certificates or to practice midwifery. In a few instances the Medical Council was forced to take action in respect of registered midwives against whom charges of negligence and mal-practice had been preferred by the Chief Health Officer. The names of these women have been removed from the register. Police Court proceedings were instituted in certain cases in which it was found that women who were incompetent and dangerous to the community were practising as midwives. Penalties were inflicted in each case, and the Medical Council has determined to press for a full penalty in similar cases in the future in order to protect the interests of the community.

A TRAVELLING FELLOWSHIP.

The Senate of the Sydney University has accepted the offer from the Trustees of the Walter and Eliza Hall Trust, of a travelling medical fellowship. The fellow will be appointed by the Senate, on the recommendation of the medical faculty. Candidates must be graduates in medicine of the University of Sydney of not more than five years' standing. In the selection, preference will be given to candidates who can produce evidence of exceptional proficiency shown during his medical curriculm as a student, capacity for research, and fitness to further the objects of the foundation. On his appointment, the fellow will be required to submit a scheme of work for the first two years to the Senate for approval, while the third year will be spent in the University, where he will be required to undertake teaching duties. The idea of the fellowship is that the holder is to obtain special experience in clinics of laboratories abroad, and to impart the knowledge so gained to the medical school of the University on his return. The fellowship is worth £900, with £300 extra for apparatus and travelling expenses: £150 will be paid to the fellow on leaving Australia, £100 will be paid each six months up to the end of the second year, £150 after a further six months, and £200 at the termination of the fellowship. No other position may be held during the three years.

Our attention has been drawn to a new map of Sydney and suburbs, by H. E. C. Robinson (published by W. Kingsford Smith). The map is drawn to scale 1 in 23,760. It is mounted on canvas attached to a spring roller, and has a varnished surface. All the streets, tramway and railway routes, etc., and many of the public buildings are marked. The price is £2. This map should prove useful to practitioners in the metropolis of Sydney.

A Convalescent Home has just been opened at Hartpury, Milton Street, St. Kilda, Melbourne, by Mrs. Conrick, the mother of Dr. H. Victor Conrick, who is serving with the first Expeditionary Force (Medical Unit). We are informed that the house is equipped with all modern conveniences, and stands in extensive well-laid-out grounds.

Correspondence.

AN AMBULANCE CHASSIS.

Sir,—In reference to the above, no doubt many medical men have noticed how rough to the occupant a motor car is upon ordinary roads as compared with a good hansom cab with its large wheels and solid rubber tyres. One can read his Journal in such a cab on ordinary roads, but cannot do so in a motor car although the latter has springs and shock absorbers, and even pneumatic tyres.

A letter in the "British Medical Journal" of October 24, 1914, p. 738, affords much interesting and useful information upon this important subject and should be read by all interested in motor ambulance work.

It appears that an ambulance chassis should have large wheels, at least 4 to 4½ feet in height, and well clear of the side of the body.

Should such a chassis be manufactured and fitted with the new Australian Glide Springs it is likely that there would be no necessity for pneumatic tyres, as solid rubber tyres would do.

There has been much attention given to the coach-building part of motor ambulances, but it is also necessary to direct more attention than has been done to the construction of a suitable ambulance chassis.

Yours, etc.,
MEDICAL OFFICER.

Sydney,
December 11, 1914.

Proceedings of Australian Medical Boards.

QUEENSLAND.

The following persons have been registered under the provisions of the "Medical Act of 1867" as duly qualified medical practitioners:—

Hawthorne, Harold Lester (Toowoomba), M.B., Ch.M., Univ. Sydney, 1913.

Patrick, James King (Brisbane), M.B., Ch.B., 1901; M.B., 1913, Univ. Glasgow; D.P.H. R. Colls. Ph. and S. Ireland, 1910.

Personal.

Dr. Scot Skirving has returned to Sydney, and has resumed practice.

Dr. Wilfred B. Dight has removed from Scone, New South Wales, to "Belmont," Gordon Road, Roseville, where he is now practising in partnership with Dr. Clarence Read.

Dr. L. H. Foy has commenced practice at Old Canterbury Road, Hurlstone Park, New South Wales.

Dr. Gateward C. Davis has resumed practice at Beanbah, 235 Macquarie Street, Sydney.

Dr. S. Harry Harris has been appointed Honorary Urologist to the Lewisham Hospital, Sydney, New South Wales. As far as we are aware, this is the first appointment of a medical officer for urology to any hospital in the Commonwealth, and marks a tendency of the day toward the development of special departments for the various branches of medicine and surgery.

Dr. D. McWhae, Maylands, Western Australia, has entered into partnership with Dr. F. C. Thompson.

Dr. Carl Stephens, of North Melbourne, has commenced practice at 54 Collins Street, Melbourne.

Dr. Barclay, of Auckland, has been appointed Superintendent of the Wellington Hospital, New Zealand.

We learn that Dr. L. A. Lewis, sometime medical officer of the Waikato Sanatorium, New Zealand, has received a

commission in the R.A.M.C., and is now on active service. Dr. Lewis has for some little time past been working at King Edward VII. Sanatorium, Cardiff, South Wales.

The Hon. Sir Charles Mackellar, M.B., M.L.C., has resigned his office of President of the State Children's Relief Board, New South Wales. The appointment of his successor will be announced shortly.

Medical Appointments.

Dr. Baron Brooke has been appointed medical officer under the Department of Public Instruction on probation for six months.

In the "Western Australian Gazette" under date of December 4, 1914, the following announcement is made:—

> Dr. J. Innes-Stephen as Chairman of the Boat Licensing Board, Onslow, such appointment having been made in error.

Sir David Hardie has been appointed Acting President of the Queensland Medical Board during the absence of the President.

Medical Appointments Vacant.

CHILDREN'S HOSPITAL INCORPORATED, PERTH.

APPLICATIONS are invited for the position of CHIEF RESIDENT MEDICAL OFFICER; salary £300 with board, lodging and laundry. Term: one year, with option of renewal; children's experience essential. Registration paid, and £10 10s. towards travelling expenses. Applications to reach General Secretary by 12th January, 1915.

C. J. KILLICK,
General Secretary.

New South Wales Public Service Board,
4 O'Connell Street, Sydney,
December 5, 1924.

APPLICATIONS are invited for the position of MEDICAL OFFICER (Female), Medical Branch, Department of Public Instruction, Professional Division. Salary, £400 per annum and travelling expenses. Duties will be mainly limited to districts near the large country towns. Application should reach the undersigned not later than 11th January, 1915. In terms of the Public Service Act, suitable applicants already permanently employed in the Public Service will receive first consideration in the filling of permanent positions.

By order of the Board.
R. A. GILFILLAN, Secretary.

QUEEN VICTORIA SANATORIUM, THIRLMERE.

RESIDENT MEDICAL OFFICER (LADY) required for above Institution; salary £300 per annum for first year, and £350 per annum for second and thereafter, with board and residence. Applications with testimonials to be sent to

H. A. JAMES,
Hon. Secretary,
Queen Victoria Homes Office,
8 Bligh Street, Sydney.

Medical Appointments Sought, etc.

Hospitality Locum offered for month or longer to doctor's family; near sea and bream fishing. Shooting, golf, tennis, riding and driving. Work very light. Address "DOCTOR," St. Mary's, Tasmania.

Books Received.

QUAIN'S ANATOMY, edited by Sir Edward Albert Schafer, LL.D., Sc.D., M.D., F.R.S., Johnson Symington, M.D., F.R.S., and Thomas Hastie Bryce, M.A., M.D. Vol. II., Part II. Splanchnology by J. Symington, M.D., F.R.S. 1914. London: Longmans, Green and Co.; Sydney: George Robertson and Co.; Royal 8vo., pp. 392, with 349 illustrations. Price, 10s. 6d.

THE CHEMICAL EXAMINATION OF WATER, SEWAGE, FOODS AND OTHER SUBSTANCES, by J. E. Purvis, M.A., and T. R. Hodgson, M.A., 1914. Cambridge and London: Cambridge University Press; pp. 228, 8vo. Price, 9s. net.

INDISPENSABLE ORTHOPAEDICS—A HANDBOOK FOR PRACTITIONERS, by F. Calot. Translated from the Sixth French Edition by A. H. Robinson, M.D., M.R.C.S., and Louis Nicole, with 1,252 original illustrations and 8 coloured plates. 1914: London, Bailliere, Tindall and Cox, Royal 8vo., pp. 1175. Price 21s.

Diary for the Month.

Dec. 22.—New South Wales Branch B.M.A., Committee Meeting.
Jan. 5.—New South Wales Branch B.M.A., Council Meeting.
Jan. 6.—Victorian Branch B.M.A., Monthly Meeting.
Jan. 15.—New South Wales B.M.A., Council Meeting.
Jan. 20.—Western Australian Branch B.M.A., Branch Meeting.
Jan. 26.—New South Wales Branch B.M.A., Committee Meetings.
Jan. 27.—Victorian Branch B.M.A., Council Meeting.

Important Notice.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
QUEENSLAND. (Hon. Sec. B.M.A. Building, Adelaide Street, Brisbane).	Brisbane United F.S. Institute. F.S. Lodges at Longreach. F.S. Lodges at Warwick.
WESTERN AUSTRALIA. (Hon. Sec. 230 St. George's Terrace, Perth).	Swan District Medical Officer. All Contract Practice Appointments in W.A.
NEW SOUTH WALES. (Hon. Sec. 30-34 Elizabeth Street, Sydney).	Australian Natives Association. Balmain United F.S. Dispensary. Burwood District F.S. Institute. Carrington Lodge, No. 75, P.A.F.S. of A., Randwick. Goulburn F.S. Association. Leichhardt and Petersham Dispensary. M.U. Oddfellows Med. Inst., Elizabeth Street, Sydney. N.S.W. Ambulance Association and Transport Brigade. N. Sydney United F.S. People's Prudential Benefit Society. Phœnix Mutual Provident Society. F.S. Lodges at Braidwood. F.S. Lodges at Casino. F.S. Lodges at Lithgow. F.S. Lodges at Mudgee. F.S. Lodges at Orange. F.S. Lodges at Parramatta, Granville, Penrith and Auburn. Killingworth Colliery, Newcastle. Seaham Colliery No. 1, Newcastle. Seaham Colliery No. 2, Newcastle. West Wallsend Colliery, Wallsend.
SOUTH AUSTRALIA. (Hon. Sec. 3 North Terrace, Adelaide).	The F.S. Medical Assoc, Incorp., Adelaide.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this Journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to the "Medical Journal of Australia" alone, unless the contrary be stated.

All communications should be addressed to "The Editor," "Medical Journal of Australia," B.M.A. Building, 30-34 Elizabeth Street, Sydney, New South Wales.